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Mahatma Gandhi Chitrakoot Gramoday Vishwavidyalaya, Chitrakoot, Satna: A Profile

[illegible] Behari Mohanty

Qualitative Improvement in Higher Education

(Part-I)

[illegible]

Wailing Doctoral Research

[illegible]

Relevance of Management Studies for Engineers

[illegible]

Challenges to Pharmaceutical Industries

–Convocation Address

IATLIS NATIONAL CONFERENCE
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WORKSHOP ON ACCREDITATION AND CERTIFICATION OF LIBRARIES

Association of Indian Universities

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REGISTRAR

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Mahatma Gandhi Chitrakoot Gramoday Vishwavidyalaya, Chitrakoot, Satna: A Profile

The Mahatma Gandhi Chitrakoot Gramoday Vishwavidyalaya, *Chitrakoot is hosting the East Zone Vice Chancellors' Conference* of the Association of Indian Universities on the eighth and ninth of November, 2003 at Chitrakoot (MP).

Genesis

The Dr Radhakrishnan Committee had proposed the concept of Rural University as a synthesis of the following four international experiments.

- *Folk Højskole System* in Denmark by Grundtvigs, as a People's College Model.
- *Sriniketan* programme by Tagore at the University Level.
- *Nai Talim* by Gandhiji at the School Level.
- Land Grant System of the USA (Arthur Demorgan) at the Professional University Level.

After the first 'institute level effort' at Gandhigram during 1956, the Mahatma Gandhi Chitrakoot Gramoday Vishwavidyalaya, Chitrakoot became the first formal Rural Development University of the country.

A perusal of the academic, research and extension activities of the University would reveal that the Rural University at Chitrakoot is evolving as a distinctive model.

Distinctive Functions of the Rural University

Practice-based Teaching

- To fill the human resource gaps in the Research and Development Professionals.
- To reorient and retrain Government or NGO cadres.
- To provide awareness, skill and attitudinal change in the public.

Action Research

- Model of Rural Development Management
- Local Self Governance and Development Administration
- Sustainable Agriculture Technologies and Industrialisation
- GIS and Micro-level Planning and e-Governance

Extension (Government Support Functions)

- Rural Development Strategies/Policies
- Monitoring and Evaluation
- Pilot Projects for Innovations
- Development Models
- Reorienting/Upgrading Cadres
- Technologies and Delivery Systems
- Data Support Systems

Professional Courses at MGCGV

Broad Area	Name of the Degree	Regulatory Body
Rural	MBA Rural Management	AICTE
	MBA Small Business Management	AICTE
	MBA Agri-Business Management	AICTE
Gramswaraj NGO Capacity	MA/BA Development Adminstration	G.M.P.
	MA Social Work	G.M.P.
	MA/Dip Dev Alternative and Voluntary Action	G.M.P.
Science and Technology for Sustainable Habitat and Livelihood	M.Sc. Environemental Science	G.M.P.
	M.Sc. Resource Inventory and Planning	G.M.P.
	M.Sc. Industrial Chemistry	G.M.P.
	PG. Dip in Remote Sensing and GIS	G.M.P.
	PG. Dip. Habitat Technologies	G.M.P.
	B.Tech. Food Technology	AICTE
	B.Tech. Agril Engg. (Spln. Watershed)	AICTE
	B.Tech. Information Technology	AICTE
	B.Sc Information Tech. *Applications(Honors)*	G.M.P.
	B.Sc. Agri & Entrepreneurship	ICAR
	P.G Diploma in Remote Sensing and GIS	Appreciation
Development Communication	BFA with focus on Development Communication	G.M.P.
	B.J. (Development Journalism)	G.M.P.
	B.Ed.	N.C.T.E
	B.A. Human Conscience and Yogic Science	U.G.C

Highlights of the Flexible Education System at Chitrakoot

The following innovations have led to a truly flexible education system

- Credit System
- Modular courses, with multi-entry, multi-exit facilities
- Add-on courses to facilitate employment orientation
- Degree based on field work (for example, Dip. MA inDAVA)
- Rowing courses (for example MA Dev. Admn.)
- Degree with entrepreneurship (for example: BSc Agriculture and Entrepreneurship MBA Small Business Management)
- Convergence of Conventional and Open Systems.

Steps Towards Practice–based Instruction and Quality

The university has a vision of Instruction Through Construction with a "Camp+ Campus" approach. To implement the "Camp" style of 'learning through doing' it has evolved a model of *Kshetrawas*. (whereby students of an entire course stay in the project site and participate in development projects).

Project Style of Functioning

To facilitate the practice-based learning process, a project environment has been created.

The university has two international projects and about 25 funded action-research projects besides about 30 minor research projects and more than 100 PhD projects.

Extension Work: A Workable Model of Outreach Work in Partnership with the Government

The university networks with various knowledge centres to find solutions to the problems and then facilitates the implementation by networking with the NGOs and *Panchayatiraj* institutions.

The university has been made a partner in policy planning and nurturing of programmes like *Gram-Swaraj* and participation in activities like:

- Monitoring and Evaluation
- Pilot Projects
- Creation of Models

Pilot projects in Sagar, Panna and Satna districts have demonstrated how the Rural University could become a partner of the government in rural development action.

Future Plans

Mahatma Gandhi Chitrakoot Gramoday Vishwavidyalaya is the first full-fledged Rural University of the country set up on the basis of the Radhakrishnan Commission. The idea is to evolve a rural higher education capable of creating managerial personnel for rural development and capable of giving development models to the state and a delivery system for physical technologies and social technologies for rural transformation.

During the next five years the university is expected to establish five campuses in the state and to establish partnership with 90 NGOs in the 45 districts under its jurisdiction.

The university is also expected to provide selected affiliation to about 100 rural development oriented institutions in the country and also establish partnership with top institutions in the SAARC countries.

Many more interfaces and joint ventures are expected with government wings like tribal development, rural industries, PHE, agriculture, women and child, and major Livelihood Guidance Centers are expected to be set up in collaboration with institutions like NABARD, KVIC, RRL and Corporate Houses.

During the next 10 years the University should have downward link with every block and the PRIs with a network of Rural Technology Centres with significant success in livelihood enhancement and *Gram Swaraj* based administration.

The vision is to evolve a peoples University capable of creating a community and ascending the ladder of quality of life. ❑

Qualitative Improvement in Higher Education (Part-I)*

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The importance of higher education has been pointed out by the International Commission on Education for 21st Century "Higher education is at one and the same time one of the driving forces of economic development and the focal point of learning in a society. It is both repository and creator of knowledge. Moreover, it is the principal instrument for passing on the accumulated experience, cultural and scientific, of humanity" (Delors 1996, p 130). The World Declaration on Higher Education 1998 Adopted by the World Conference on Higher Education organised by UNESCO in October 1998 in its preamble stated the importance of higher education in the following manner:

> "On the eve of a new century, there is an unprecedented demand for and a great diversification in higher education, as well as an increased awareness of its vital importance for sociocultural and economic development, and for building the future, for which the younger generations will need to be equipped with new skills, knowledge and ideals. Higher education includes 'all types of studies, training or training for research at the post-secondary level, provided by universities or other educational establishments that are approved as institutions of higher education by the competent State authorities'. Everywhere higher education is faced with great challenges and difficulties related to financing, equity of conditions at access into and during the course of studies, improved staff development, skills-based training, enhancement and preservation of quality in teaching, research and services, relevance of programmes, employability of graduates, establishment of efficient co-operation agreements and equitable access to the benefits of international co-operation. At the same time, higher education is being challenged by new opportunities relating to technologies that are improving the ways in which knowledge can be produced, managed, disseminated, accessed and controlled. Equitable access to these technologies should be ensured at all levels of education systems.
>
> ...Without adequate higher education and research institutions providing a critical mass of skilled and educated people, no country can ensure genuine endogenous and sustainable development and, in particular, developing countries and least developed countries cannot reduce the gap separating them from the industrially developed ones. Sharing knowledge, international co-operation and new technologies can offer new opportunities to reduce this gap.
>
> Higher education has given ample proof of its viability over the centuries and of its ability to change and to induce change and progress in society. Owing to the scope and pace of change, society has become increasingly knowledge-based so that higher learning and research now act as essential components of cultural, socio-economic and environmentally sustainable development of individuals, communities and nations. Higher education itself is confronted therefore with formidable challenges and must proceed to the most radical change and renewal it has ever been required to undertake, so that our society, which is currently undergoing a profound crisis of values, can transcend mere economic considerations and incorporate deeper dimensions of morality and spirituality". (UNESCO 1998)

According to the said document, the mission of higher education is to educate, to train and to undertake research. It stated that the core missions and values of higher education, in particular the mission to contribute to the sustainable development and improvement of society as a whole, should be preserved, reinforced and further expanded, namely, to:

(a) educate highly qualified graduates and responsible citizens able to meet the needs of all sectors of human activity, by offering relevant qualifications, including professional training, which combine high-level knowledge and skills, using courses and content continually tailored to the present and future needs of society;

---

*An article in three parts.

(b) provide opportunities for higher learning and for learning throughout life, giving to learners an optimal range of choice and a flexibility of entry and exit points within the system, as well as an opportunity for individual development and social mobility in order to educate for citizenship and for active participation in society, with a worldwide vision, for endogenous capacity-building, and for the consolidation of human rights, sustainable development, democracy and peace, in a context of justice;

(c) advance, create and disseminate knowledge through research and provide, as part of its service to the community, relevant expertise to assist societies in cultural, social and economic development, promoting and developing scientific and technological research as well as research in the social sciences, the humanities and the creative arts;

(d) help understand, interpret, preserve, enhance, promote and disseminate national and regional, international and historic cultures, in a context of cultural pluralism and diversity;

(e) help protect and enhance societal values by training young people in the values which form the basis of democratic citizenship and by providing critical and detached perspectives to assist in the discussion of strategic options and the reinforcement of humanistic perspectives;

(f) contribute to the development and improvement of education at all levels, including through the training of teachers."

Access to Higher Education in India: Improving Distribution of University Level Institutions among States and Union Territories

The scenario can be seen from the following table (See Table 1).

There has been variation in types of university level institutions. The nation has 304 university level institutions, out of which 44 are centrally funded, 241 are State funded and 19 are jointly funded. The maximum number of centrally funded university level institutions are located in Delhi (12), followed by Uttar Pradesh (five). There are three each in case of A.P., Assam and West Bengal; two such institutions in case of Haryana, Karnataka and Maharashtra. There is one such institution in case of each of the State/UT of Chandigarh, Jharkhand, Kerala, Manipur, Meghalaya, Mizoram, Nagaland, Pondicherry, Punjab and Tamil Nadu. These are the fortunate States and UTs. There is no centrally funded university level institution in case of State/UT of Arunachal, Bihar, Chhattisgarh, Goa, Gujarat, Himachal, Jammu and Kashmir, Orissa, Rajasthan, Sikkim, Tripura and Uttaranchal. There are 217 universities, out of which, 17 are Central universities and remaining 200 are State universities. The maximum numbers of Central Universities are located in Delhi - four. There are three such universities in UP, two such universities in A.P. and Assam. There is one such university in each of the States of Maharashtra, Meghalaya, Mizoram, Nagaland, Pondicherry and West Bengal. There are only 10 Open Universities The States having no Open university should go for it so as to provide their people better opportunity for lifelong education. There are only five women's university level institutions out of which, three are universities - one each in case of Andhra Pradesh, Maharsahtra and Tamil Nadu and two of these are institutions deemed to be universities located at Rajasthan and Tamil Nadu. Other States have not felt any necessity for women's university level institutions (See Table 2).

The nation has 35 Agricultural/Veterinary university level institutions and two institutions for fisheries. The States having no such institutions are Arunachal Pradesh, Goa, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. There are 17 university level medical institutions. There are three such institutions each in case of Andhra Pradesh and Tamil Nadu, two each in Delhi and Punjab and one each in Chandigarh, Gujarat, Haryana, Karnataka, Kerala, Maharashtra, Sikkim and UP. Gujarat has the only Ayurved University of the country. The Medical University is the only university in Sikkim. There is one institution deemed to be a university exclusively for Mental health and Neuro sciences located in Karnataka. There is one university for handicapped located at Chitrakoot Dham in UP. There are four institutions for Physical Education and one for Yoga. There are four institutions for Information Technology and one for Journalism. There are 45 Technical University level institutions including one for Architecture. There are six Law Universities. There are two institutions exclusively for Science. There is one institution exclusively for Statistics. There are three university level institutions for Culture, one for Music, one for *Kala Sangeet* and one for Museum. In case of languages, there are 16 language university level institutions: nine for Sanskrit, three for State languages

Table 1 : Types of University Level Institutions and Population served by them

Sl.No	State/UT	No. of university level institutions	Population 2001 (Lakhs)	Population served per institution (Lakhs)	No. of Institutions of national importance	No. of Institutions Deemed to be universities	No. of universities	Central Funding	Joint funding	State funding	Women	Open
	Total	304	10270.0	33.8	13	74	217	44	19	241	5	10
1	Andhra	23	757.3	32.9	0	6	17	3	1	19	1	1
2.	Arunachal	01	10.9	10.9	0	0	1	0	0	1	0	0
3.	Assam	07	266.4	38.1	1	1	5	3	1	3	0	0
4	Bihar	12	828.8	69.1	0	1	11	0	0	12	0	1
5.	Chandigarh	02	9.0	4.5	1	0	1	1	0	1	0	0
6.	Chhattisgarh	09	208.0	23.1	0	0	9	0	1	8	0	0
7	Delhi	15	137.8	9.2	2	8	5	12	0	3	0	1
8	Goa	01	13.4	13.4	0	0	1	0	0	1	0	0
9	Gujarat	12	506	42.2	0	2	10	0	0	12	0	1
10.	Haryana	07	210	30.0	0	3	4	2	1	4	0	0
11	Himachal	05	60.8	12.2	0	1	4	0	1	4	0	0
12	J & K	05	100.0	20.0	0	0	5	0	0	5	0	0
13	Jharkhand	06	269.1	44.9	0	2	4	1	0	5	0	0
14	Karnataka	19	527.3	27.8	0	6	13	2	2	15	0	1
15	Kerala	09	318.4	35.4	1	1	7	1	1	7	0	0
16.	M. P.	17	603.9	35.0	0	3	14	2	1	14	0	1
17.	Maharashtra	33	967.5	29.3	1	13	19	2	1	30	1	1
18	Manipur	02	23.9	12.0	0	0	2	1	0	1	0	0
19.	Meghalaya	01	23.1	23.1	0	0	1	1	0	0	0	0
20	Mizoram	01	8.9	8.9	0	0	1	1	0	0	0	0
21.	Nagaland	01	19.1	19.1	0	0	1	1	0	0	0	0
22.	Orissa	09	367.1	40.8	0	1	8	0	1	8	0	0
23.	Pondicherry	01	9.7	9.7	0	0	1	1	0	0	0	0
24.	Punjab	08	242.9	30.4	1	2	5	1	1	6	0	0
25.	Rajasthan	15	564.7	37.6	0	6	9	0	1	14	1	1
26	Sikkim	01	5.4	5.4	0	0	1	0	0	1	0	0
27	Tamil Nadu	27	621.1	23.0	2	9	16	1	2	24	2	0
28.	Tripura	01	31.9	31.9	0	0	1	0	0	1	0	0
29.	Uttaranchal	07	84.8	12.1	1	2	4	0	2	5	0	0
30.	U. P.	30	1660.5	55.4	1	6	23	5	1	24	0	1
31.	W. B.	17	802.2	47.2	2	1	14	3	0	14	0	1
32.	A & N Island	0	2.8	0	0	0	0	0	0	0	0	0
33.	Daman & Diu	0	1.0	0	0	0	0	0	0	0	0	0
34.	Lakshadweep	0	0.5	0	0	0	0	0	0	0	0	0
35.	Dadra & NH	0	2.2	0	0	0	0	0	0	0	0	0

(Source: Census 2001 and AIU List January 2003)

Table 2 : Subjectwise Distribution of University Level Institutions

State/UT	Total	Agriculture/ Fisheries*/Vet#	Technical/Architect@ Science#	Medical/Ayurvedic*	Jainism/Mental Health*	Phy.Edn./Yoga*/ Handicapped@	Forestry&Horiculture	Inf.Tech./Journalism*	Law/Statistics*	Culture/Music*/Kala Sangeet@/Museum#	State languages	Sanskrit/English etc.*	Hindi/Urdu*	Teacher edn/Tibetian*	Others
	304	34/3*/2#	42/1 /2#	17/1*	1/1*	1/4*/1@	2	4/1*	6/1*	3/1*/ 1@/1#	3	9/1*	2/1*	1/1*	156
Andhra	23	1	1	3				1	1		1	1/1*	1*		12
Arunachal	1	0													1
Assam	7	1	2												4
Bihar	12	1				1*						1			9
Chandigarh	2	0		1											1
Chhattisgarh	9	1	1							1@					6
Delhi	15	1	2/1@	2		1*				1#		2			5
Goa	1	0													1
Gujarat	12	1	1	1*											9
Haryana	7	1/1#	1	1											3
H.P.	5	2					1	1							1
J & K	5	2													3
Jharkhand	6	1	2												3
Karnataka	19	2	2/2#	1	1*	1*			1		1				8
Kerala	9	1	2	1								1	1		3
M. P.	17	1	2			1/1*		1/1*	1	1					8
Maharashtra	33	4/2*	6	1								1	1		18
Manipur	2	1													1
Meghalaya	1	0													1
Mizoram	1	0													1
Nagaland	1	0													1
Orissa	9	1	1							1		1			5
Pondicherry	1	0													1
Punjab	8	1	3	2											2
Rajasthan	15	2	2		1				1			1		1	7
Sikkim	1	0		1											0
Tamil Nadu	27	2	7	3					1		1		1		12
Tripura	1	0													1
Uttaranchal	7	1	1				1			1					3
U. P.	30	4/1#	3	1		1@		1		1*		1		1*	16
W. B.	17 7	1*/ 2	3						1/1 *						9

(Source: Census 2001 and AIU List January 2003)

(Tamil, Telugu, and Kannada), two for Hindi and one each for Urdu and English. There are two university level institutions for Forestry and Horticulture. There is one institution deemed to be university for Teacher Education located in Rajasthan.

Growth of Universities

The growth of universities can be seen from the following Table:

Decade	No. of universities opened during the decade	Total	Decade	No. of universities opened during the decade	Total
1857-1866	3	3	1927-1936	2	15
1867-1876	0	3	1937-1946	3	18
1877-1886	0	3	1947-1956	17	35
1887-1896	1	4	1957-1966	33	68
1897-1906	0	4	1967-1976	37	105
1907-1916	2	6	1977-1986	30	135
1917-1926	7	13	1987-2003	82	217

The above Table indicates that after the establishment of three universities in 1857, there was a lull for three decades. In the next decade only one university was established and there was no new university in the following decade. The process of establishment of new universities was in single digit till Independence. The growth rate of universities has increased at a faster rate after independence. There were only 35 universities during the hundred year period from 1857 to 1957. In the decade after 1957, there were 33 new universities. In the next decade there were 37 more universities. The number decreased a little during the next decade. The present number of universities is eight times more than the number of universities at the time of attainment of Independence. There has been ill distribution of university level institutions in different parts of the country. Population served by a State or Union Territory varies from 4.5 lakh (Chandigarh) to 69.1 lakh (Bihar), while at national level the figure is 33.8 lakh. The States which should be given preference in establishment of university level institutions in order of priority are : Bihar(69.1), Uttar Pradesh (55.4), West Bengal (47.2), Jharkhand (44.9), Gujarat (42.2), Orissa (40.8), Assam (38.1), Rajasthan (37.6), Kerala (35.4), and Madhya Pradesh (35). Again, there may be ill distribution among districts. Unsystematic growth of higher education institutions has affected the quality of the programmes and has given rise to wastage in higher education. In order to have equitable distribution of central funding there should be at least one Central Teaching University in each State and at least one Institution of National Importance in each large sized State.

Qualitative Improvement in Higher Education in India

There are various aspects of qualitative improvement of higher education. Some of these are as follows:

Improving Quality of Evaluation of Higher Education Institutions

The World Conference on Higher Education 1998 pointed out importance of evaluation of higher education institutions and their programmes.

"Article 11 - Qualitative evaluation

(a) Quality in higher education is a multidimensional concept, which should embrace all its functions, and activities: teaching and academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment. Internal self-evaluation and external review, conducted openly by independent specialists, if possible with international expertise, are vital for enhancing quality. Independent national bodies should be established and comparative standards of quality, recognized at international level, should be defined. Due attention should be paid to specific institutional, national and regional contexts in order to take into account diversity and to avoid uniformity. Stakeholders should be an integral part of the institutional evaluation process.

(b) Quality also requires that higher education should be characterized by its international dimension: exchange of knowledge, interactive networking, mobility of teachers and students, and international research projects, while taking into account the national cultural values and circumstances.

(c) To attain and sustain national, regional or international quality, certain components are particularly relevant, notably careful selection of staff and continuous staff development, in particular through the promotion of appropriate programmes for academic staff development, including teaching/learning methodology and mobility between countries, between higher education institutions, and between higher education institutions and the world of work, as well as student mobility within and between countries. The new information technologies are an important tool in this process, owing to their impact on the acquisition of knowledge and know-how."(Unesco 1998)

In India, in pursuance of the stipulations made in the National Policy on Education 1986 and its Programme of Action document, the university Grants Commission (UGC), under section 12 CCC of the UGC Act of 1956(3), established the National Assessment and Accreditation Council (NAAC) on 16 September 1994 at Bangalore.

Improving NAAC Assessment and Accreditation Procedures

NAAC has formulated three-stage process for assessment and accreditation: 1.Preparation of the Self-study Report by the institution/ department based on the parameters defined by NAAC; 2.Validation of the Self-study Report by a team of peers through on-site visit; presentation of detailed quality report to the institution; and 3. The final decision on assessment and accreditation by the Executive Committee (EC) of NAAC. The Criteria of assessment for various types of institutions are:

Criteria	Units of Assessment		
	Univ.	Affiliated/ Constituent Colleges	Autonomous Colleges
Curricular Aspects	15	10	15
Teaching-learning & Evaluation	25	40	30
Research, Consultancy and Extension	15	05	10
Infrastructure and Learning Resources	15	15	15
Student Support and Progression	10	10	10
Organisation and Management	10	10	10
Healthy Practices	10	10	10
TOTAL	100	100	100

The Institutional score is the overall grade. If the overall score is more than 55%, the institution gets the "Accredited status" and any score less than that will lead to "Not Accredited status". The accredited institutions are graded on a nine-point scale with the following scale values:

Institutional (upper limit exclusive)	Grade	Institutional (upper limit exclusive)	Grade
95-100	A++	70-75	B
90-95	A+	65-70	C++
85-90	A	60-65	C+
80-85	B++	55-60	C
75-80	B+		

The grade is also supplemented by a qualitative report by the team that highlights the strengths and weaknesses of the institution under various criteria. Institutions which do not attain the minimum 55% points for accreditation, are also intimated and notified indicating that the institution is assessed and found not qualified for accreditation. The range of marks of each letter grade, and actual total marks obtained as well as criterion wise marks are intimated to the institution and notified. NAAC has a Website: www.naac-india.com. Information regarding position of each institution including its assessment report is available in the web site for general public. Earlier NAAC used to award Stars 1-5, 5 being best.

Making Provision for Assessment of Classroom Teaching

Teaching is an important aspect of an institution. Quality of performance of students is not the sole indicator of quality of teaching provided in an institution. Some students also learn well without attending classes; by going to coaching classes, libraries and other sources. Hence, NAAC needs to make provision for assessment of classroom teaching performance of a few teachers selected at random. The assessment needs to take into consideration the conditions under which a teacher teachers such as quality of students - their level of aptitude, attitude, interest, and intelligence, regularity in attending classes, ability of students in the language which is the medium of instruction and pressure and the necessity to explain to the students in local language in addition to explaining through the medium of instruction. It should also consider the general atmosphere of the college such as noise in the corridors and availability of material resources such as Over Head Projector, LCD Projector and Computer for power point presentation and VCR, etc. There may be recording of the performance and the observed teacher may sit with the observer team in assessing the performance, so that it is transparent and effective.

Having a Common Set of Assessment Criteria for All Types of Institutions

Out of the seven criteria, there are differences among three categories of institutions in respect of three criteria. As the postgraduate Dept teachers in general non autonomous colleges are not of less in calibre than those in autonomous colleges or in university departments, the criteria for all units of assessment should be same. NAAC being an institution managed by UGC which is dominated by professors, in case of universities, there is undue stress on research, consultancy and extension and curriculum and undue lowering of stress in respect of teaching, learning and evaluation. There are many non- autonomous colleges which have got better grades in NAAC assessment than grades received by many autonomous colleges and universities. Hence, it may be appropriate to have a common yard stick of measurement and evaluation for all types of institutions.

Carrying out Physical Verification of Data without Prior Notice

Since, it is a common knowledge that institutions can doctor the data and even get materials on loan on the eve of visit of NAAC peer team visit, it may be appropriate that NAAC may provide for a few visits without prior notice, for carrying out physical verification of data.

Making Provision for Specification of Assessment for Departments in Colleges and Universities

Recently, India Today published findings of a Gallup survey (Chengappa, R., et al 2003). As per the report Loyola College, Chennai was ranked No.1 in case of Arts, but was ranked No.4 in case of both science and commerce. Madras Christian College was ranked No.1 in science, but was ranked No.8 in Commerce and No. 6 in Arts. There is an autonomous and state government managed college, which could not get Ninth Plan postgraduate Development Grant for three of its postgraduate Departments due to want of three doctorates in its faculty, whereas other PG Departments got the grant. Hence, there is much variation from Department to Department. NAAC assessment may be more meaningful, if along with over all assessment of a college or university, each Department of a College or a university is also assessed and given a rank

Making Provision for Coursewise Assessment

As indicated above, a college may be excellent in case of B. A. course programme but may not be equally good in case of B.Com course. Hence, there should be course wise assessment.

Making NAAC Assessment Optional

NAAC Fee for a single faculty college is Rs.25,000/- and for a college having Arts, Science and Commerce is Rs.50,000/-. A large number of these colleges know that they are poor and their teachers get as low as Rs.1000/- (one thousand only) monthly remuneration. It is an irony of fate that instead of utilising available funds in increasing remuneration amount for teachers, the colleges are to spend huge amount for paying NAAC fees and taking care of NAAC peer team that may visit the institution. Hence, it is necessary that a college should not be compelled to get itself assessed by NAAC.

Taking Adequate Caution in Selecting Students for Evaluating their Teachers

Student evaluation of teachers shall have some meaning when the concerned student is really interested to learn, is of high academic standard and is regular in attending classes. In majority of situations except IIT, IIM and some other general and professional Institutions, students are not interested in learning but in acquisition of degrees and diplomas without attaining proper levels of learning. Evaluation of teachers by such students will be a farce. There was a Refresher Course in Education subject. Most of the participants were from affiliated colleges and did not have much expertise in the subject. The author asked the participants to evaluate the resource persons in a five point scale on specified aspects of their teaching. . The grades given to a resource person on a particular skill varied from one to five indicating that the student group as a whole failed to evaluate their teachers. In a survey of opinion of 40 teachers of an autonomous PG College, majority of teachers opined that the bad students may intentionally under-rate a teacher who is (a) strict in the examination hall, and (b) not extra liberal at the practical examination or in case of internal assessment. The student rating of teachers may bring an unholy alliance between bad students and bad teachers and may lower teacher morale as some of the teachers may go out of way to please students, an academically bad teacher may be a good friend of students and shall be over rated by them. Student evaluation of teacher has no meaning when the teacher is not controlling the factors such as number of periods available for teaching a topic, noise out side the classroom, course of study not being designed by the teacher, etc. Teachers who are to be rated low by students may find it more difficult to face the students and this shall lower their morale. In many colleges, the students read from the guide books and pass examinations although they have not gone through the course of study. The poor students studying in a college having a poor library and no reading room, and having no capacity to buy books and journals, prefer note dictation by teachers. Such students no doubt will give high rating to the teacher who dictated notes than to the teacher who taught them through question answer technique. However, majority of the participants opined that the student evaluation is possible, if the concerned students are of PG Class, are of academically high calibre and are regular in class. Hence, caution has to be taken in selecting the students to evaluate their teachers.

Taking Steps for Stopping Political Interference in Education

The Challenge of Education document indicated that de-politicisation is not an early acceptable condition for the political parties of the country. The document says that in case of de-politicisation, "political parties will lose their cadres, not knowing where to turn for their manpower required for contesting elections and participating in demonstrations, pro-test marches and procession" (Min. of Edn 1985, p. 75). Political influence has not made the bureaucrats in education check unwanted growth in number of higher education institutions and opening of subjects and increasing seats in colleges and university departments. For instance, growth in number of colleges around a town has led to closure of a hostel in government PG College situated in a district headquarters town. There are many instances of State Governments have superseding normal set up of the Universities - senate, syndicate, etc. and appointed administrators in place of Vice-chancellors. Such administrators might have certain amount of administrative abilities, but they are surely inferior in providing academic leadership to the teachers and students. Hence, politicians need to be oriented about various aspects of higher education including establishment of new universities and colleges in different areas. Fifteen years ago, Prof. M. S. Adiseshiah, ex Vice Chancellor of university of Madras and ex-Director of Unesco Regional Office at Bangkok had suggested a few strategies that can reduce political interference in education. These were: 1. Vice Chancellorship to given on rotation basis for a tenure of 3 years to the senior most head of the department of each university, 2. The Deanship and Department headship to be given on rotation to the senior most department head and professor, 3. Registrar post to be given to the senior most administrative staff of each university, 4. Adoption of principle of rotation for membership of the senate/court and syndicate/ executive council of the university, and 5. Abolishing the post of the Chancellor and Pro Chancellor in universities and making the President or Vice president visitor of each university. Headship is given on rotation. Such suggestions, even after three decades, are still valid and need be considered for implementation.

Modification in UGC Funding Policy: Block Grant to States Instead of Direct Funding

Data submitted on human and material resources and the process of functioning of the universities and colleges form the basis for sanction of funds by the UGC. It has been observed that in many situations, such data even submitted by government colleges are fictitious. For instance, a college submits the list of teachers in which junior lecturers are shown as lecturers and submits a list of journals which have never been subscribed, etc. The affiliating university rarely carry out physical verification of data. This fraud can be drastically reduced if the concerned State government would be in charge of distributing funds to colleges and universities. The funds may be released as per population criterion.

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Wailing Doctoral Research

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Research is a systematic, controlled, empirical investigation of hypothetical proposition about presumed relations in a phenomena. Research as a component of university education was introduced only in the early parts of the 19th century and the credit for it goes to Von Hubold (1767-1835). Research is undertaken for MPhil, and PhD degrees in most of the universities in India.

This paper deals with the deficiencies, ailments and loopholes from which PhD research in most of the Indian universities suffer.

A PhD proposal since its inception to the award of the degree is routed through various statutory committees and bodies such as Research Degree Committee (RDC), Research Degree Board (RDB), Academic Council, University Syndicate etc. The chain certainty is long but all these committees and bodies involved in PhD processing take it as a routine matter without conducting any rigorous exercise to judge the research ability and originality of thought in the research work. In some of these bodies when the item concerning PhD research work comes on the agenda there is a tendency to skip it and move to the next 'important' item on the list. Evaluation, an important aspect in the PhD programme requires special attention. Poor evaluation system of PhD thesis is a cause for degradation of the research work.

The *modus operandi* of PhD evaluation works normally is as follows:

The selection of examiners to evaluate the thesis is as per convenience and not as per competence. The guide ensures that the thesis is sent to his friend, colleague or contemporary for evaluation. He always looks for a safe or convenient examiner. There appears to be a mutual obligations among examiners to approve the thesis on reciprocal basis. Basically, the policy is "you scratch my back, I'll scratch yours". Therefore same set of experts is repeatedly appointed on the panel of examiners for years together without caring for their suitability, expertise and professional competency. Cases where examiners agree to examine thesis in areas, which are not their specializations are not difficult to be found. Can one expect fair and objective evaluation on the part of a teacher examining a thesis for the highest university degree in which he lacks understanding? Even those examiners who are serious in evaluation and also comment the thesis in bad light do not reject it, as rejection of the thesis has become a rarity these days. The entirely negative report ends on a happy and positive note saying 'however, the degree may be awarded'. Further in several universities PhD viva has become a farce exercise. The conduct of PhD viva is mere ritual. The job of the committee to consider the expert reports along with viva report remains a final ceremony only. The current practice goes to the extent that the minutes of this committee approving the award of Phddegree are drafted in advance by the office to be presented to the members for their approval. The way the PhD thesis is evaluated is seriously defective and resulting in degradation of higher education.

The 'reverse filtration syndrome' whereby the brightest students do not continue with doctoral program has also been responsible for the decline in the number of brilliant students who want to join PhD programme. The salary that a fresh master's degree holder with bright academic record can get is substantially higher than the PhD scholarship. The difference has been widening over the years. Also in terms of opportunity costs, it is impossible to recoup lost earning during the period the (bright) candidate has been away from the job market while earning his doctoral degree. Uncertainty of proper employment after earning a doctorate degree does not attract many brilliant students to research. To quote the United Nations Expert (1968-74), Prof Anand S Srivastava who has remarked that "Many doctorate degree-holders are already on the road, also there is no academic or intrinsic reward in our university system to produce a better PhD, the best or the worst PhD degree gets the same result".

Ideally registration of research topic should be strictly in accordance with teacher's expertise and specialization and not otherwise. The current trend is that any teacher can be engaged as supervisor for research topic though it may not even be distantly related to his field. This seems to have happened in the Research Degree Board (RDB) of a certain University, which allowed a physical chemist to guide PhD research of two candidates in computer engineering. At present, there is little to question the authority of a supervisor to guide doctoral research.

There are supervisors whose research activity co-terminates with the submission of their own doctoral research. These supervisors due to lack of up to date and adequate research knowledge, allot to their scholars research topics which are duplicate ones, with slight alterations in the objectives of the study and cosmetic changes in the title of the research problem. As such, topics are intellectually poor and socially irrelevant (and therefore unsuitable as research topics). Normally a topic on which research has been done in one university is also allowed to be repeated with a slight variation as discussed above.

To guide PhD scholars, the guide himself should be serious researcher in the first instance; instead, many are those who do not feel their obligation to update themselves to the latest developments and information available on the subject of their interest. As a result the most pathetic situation arises when a supervisor's role falls below what is expected of him in terms of both the quality and the extent of supervision. As such doctoral research dissertations are often seen devoid of innovation and methodological sophistication due to the lack of relevant, up to date knowledge on the part of the supervisor.

Every university department in our country has automatically a right to undertake PhD programme. Alternatively stated, research is accepted as being a necessary university function; It does not matter whether the necessary facilities in terms of qualified staff, adequate library, modern equipment exist or not. For doctoral research, support system consists of both physical and intellectual nature. Viewed from this stand point, many universities are ill-equipped in terms of facilities of both kinds for teaching purposes, not to speak of research purposes. Despite lack of adequate facilities the universities continue to enroll and produce a number of PhD degree holders (obviously of poor standards).

Besides, the quality of research depends on university administrators especially the Vice Chancellor, the Pro-Vice Chancellor, the Dean, Academic Affairs and the Registrar. The recent trends, particularly in state universities to appoint non-academicians on these posts is a matter of serious concern. Such university administrators don't feel themselves as part of the community of scholars and cannot appreciate the problems or achievements of the researchers in the right perspective. Hence they give relatively less priority to the needs of the researchers.

The researchers face further harassment on account of the centrally managed affairs in the universities, the financial management of which resembles government offices. Accounts are maintained centrally, orders have to be placed centrally, various permissions have to be obtained from a central office. Often the 'control minded' officers do not appreciate the urgency of the requirements of the research scholars. If the supervisor does not happen to be the head of the department there is one more hurdle in the way of getting anything done. The system of guiding doctoral candidates is gradually converting into a money making racket for some teachers in certain universities in the country. Complaints are not uncommon that many teachers write thesis for aspirant research scholars for money. This practice has allured politicians, businessmen, bureaucrats, office people and others to get themselves registered for the highest degree to satisfy their craze to prefix the title 'Dr.' to their name. As a result more than eighty percent Ph.D's, are either bogus, stereotype or repetitive and plagiarized and hence irrelevant.The escalating costs of printing and the tendency on the part of the publishers to make a fast buck have thrown the publication of the works of learned nature out of gear. The fact that the commercial value of such work is in inverse proposition to the profundity of thought encompassed therein has tended to discourage the publication of such scholarly works. Thus the problem of utilization of researches produced at considerable expense and time also stares the researcher in the face. In a number of cases, the reports of researches do not see the light of the day. The utilization of the research findings is as essential as the conducting the doctoral programs. It is frustrating for the researcher to see his research gathering dust and not disseminated properly.

Some of the guides also have a hidden agenda of their own behind supervising research scholars. The supervisor may not be as bad as the university don picturised by Jaspal Bhatti, who makes the students do all his household chores and even pressurizes him to marry his sister-in-law. But instances of misuse of authority are certainly not lacking. There are guides who keep on picking holes in whatever work the student does with the result that a student may take five to seven years in obtaining his degree. Some expect to be entertained and feted every other evening with liquors. There are also guides who take liberties with the students of the other sex. The woes of the researchers need to be addressed at the earliest by the authorities that be. ☐

Relevance of Management Studies for Engineers

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There have been mushroom growth of management institutions in the country in the recent years, offering a plethora of management courses. While there are very well established management institutions or business schools such as Indian Institute of Management (IIMs) at various centres, IITs and XLRI, the management courses are also offered by several universities and colleges at both undergraduate and postgraduate levels.

Like engineers, a large number of MBAs are also produced in the country, in thousands, every year. But the peculiar problem of the MBAs is that they lack identity, even in the case of those coming out of the premier institutions in the country. The reason is that there is no particular entry barrier for MBAs, as the management institutes admit graduates from any subject and discipline, provided they are of reasonably good intellectual standards and can successfully compete in the competetive entrance examinations. There are many cases, where it can be readily seen that the students admitted for the MBA courses come from diversified discipilnes such as Law, Economics, Electronics, Chemical, Agriculture, Medical Science, Humanities, Commerce, Mechanical, Computer, etc.

Jobs of MBAs

Management education is imparted to people in an identical manner irrespective of their background and they sit under the same roof receiving similar education. Similarly, after passing out the courses, divergent types of jobs are taken by the students in different disciplines such as in Railways, Public relations, Accounts, Marketing, Computer, Banking, Industries, Institutes, corporates, etc. Obviusly, we can see that there is no uniformity with regard to input and output in these management institutions in the country.

In the case of profession like doctors, we can find them in hospitals or nurshing home. Similarly, in the case of profession like lawyers, we can always find them in court premises. But in the case of MBAs, they are here, they and every where and they are doing all sorts of functions and in the process lack identity of their own. The MBAs have almost become like IAS officers who jump from one post to another, which has no relation to each other at all. Even within a short span of time, most of them are transferred from one department to other, even before they get themselves acquainted with their area of posting.

Jobs of Engineers

Engineering is not a science, but an application of science. It is an art composed of skill and ingenuity in adapting scientific knowledge to the uses of humanity. Knowledge is not an end for engineers, but is the raw material from which he or she fashions structre, systems, products and services. However, any technological innovation does not occur without cost which will be monetary, and the real cost incurred due to material or services, used in the process of innovations, are scarce. So they have some monitory as well as opportunity cost. On the other hand, the worth of the products and services thus produced lies in their utility, which is also measured in economic terms. So engineers are confronted with two important interconnected environments: the physical and economic. Their success lies in altering the physical environment to produce products and services and depends upon a knowledge of physical laws which can be used in second environment, the economic.

Which of these products do you use in your daily life - plastics, metals, textiles, paper, food and beverages, fans, TVs, radios, refrigerators, telephones, scooters, automobiles, pumps, etc? Well each of these has been created under the eyes of an engineer. Converting raw materials into products that you can use is a complex process, which involves research and development, design, construction, daily plant operation and management. While it is true that engineers tend to be comfortable with science, they do much more with this knowledge than just making products.

Frontiers of knowledge are therefore bound to expand unimaginably and new researches will oblige humanities, science, technologies, management and fine arts to arrive at new equations and new combinations. Some experts say "Engineering today has moved on to assume a degree of responsibility unheard of a few years ago, spanning a value chain that is getting ever complex. The engineers now have to understand various intricacies of (a) equipment, (b) processing, and (c) stake holders in the value chain. If all these appear simple - there is the channel relationship between various stake-holding groups that have to be managed. Thus, the engineers have to put place systems, statistical and process tools, and develop a leadership model that promotes integrity and dynamism within the value chain. Going a step further, all these require channeling of energies in the direction of a core ideology - customer orientation - necessitating the need to understand marketing and distribution trends. In a nutshell - the engineers will benefit enormously from an in-depth understanding of basic management and leadership principles".

Changing of Employer Perception

Perception of employers, employees, and customers has changed after the Industrial Revolution i.e. Liberalisation, Privatization and Globalization (LPG). Biochemistry microbiology, Biotechnology, Pharma gradutes fit into Pharma Industry. Similarly Electronics, Physics graduates fit into electronic industries. Specific industries need specilist and/or trained personnel in the same area. This is true for most of the industries where technology as against perception is used as a tool to differenciate the product offering. In such a technology intensive marketing, a basic degree in the same field could be of great value.

Management Studies for Engineers

Gaping sound technical education with a management degree provides a wide perspective on industry, corporate and service sectors. According to as a senior project manager at a leading engineering consultancy company consulting engineers play a critical role in all phases of a capital project.

Whilst an MBA can be useful to engineers who are looking at carriers in either marketing or production or personnel management and industrial relations or human resources, it is also useful to those who seek to recast their carreer path on a non-technical path. A management degree can help them to develop key skills and knowledge required to manage diverse and multifaced resources in companies like human resource, personnel, material, production, customer behaviour, market environment analysis, logistics (transportation, warehouse, packaging, material handling, inventory control, supply scheduling and order processing) and rural marketing. Management studies gives them an understanding of the stuctre and operation of a business thereby building capabilities to undertake leadership roles throughout their career. It can also help them accelerate carreer path in industry and hence break corporate growth barriers.

Business are built by and grow around human resources. As people (workmen) are the key resources, all industry and corporate strengths are dependent and centred around human resources management (HRM). Modern and classical economists like Adam Smith and Karl Mark have emphasised the importance of human resources. Most of them focus on labour, dexterity and skill development measured by the resultant output of an individual. The quality of human resources can accelerate growth resulting in multiple effects.

Market Research is the support function responsible for providing information pertaining to market dynamics, competitive scenario, forecasting of industry trends, etc. Consumer behaviour is the study of the manner in which consumers respond to marketing stimuli; concepts like consumer preferences, critical pricing, consumer involvement in purchase division, purchase decision criteria for a particular product, etc. The engineers have to know all these for the purpose of profit making industry and for corporate business.

Industry needs specialised MBAs

Functions of several disciplines particularly that of industry, have now become highly specialised and it is extremely difficult for generalists to administer and manage such industries of managers who can understand the implication of various decisions and cross current of the activities in several related and interpendant areas. This obviously points to the need for preparing dedicated MBAs, catering to the requirements of the industry. This calls for specific courses where MBAs would be trained for industrial business management exclusively. It is possible that

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Challenges to Pharmaceutical Industries

A P J Abdul Kalam, President of India delivered the Convocation Address at the second convocation of the National Institute of Pharmaceutical Education and Research, Mohali on 29th September, 2003. He said, " The report has brought out multidimensions of health care problems in our country. The Vision of providing affordable and effective healthcare to our entire population goes much beyond the capability of any individual, institution or organisation. Technology is an important tool to give fast healthcare and we have to use it. This vision has to become a multi-organisational mission leading to the generation of thousands of goal oriented projects. These projects will have to be supported and nurtured not only by the Government, but also by our industry and philanthropic organisations. The most important ingredient of such a multi-organisational mission will be the leadership decentralised and yet linked together. For example the academic institutions which do research on various technological systems, will be tools for medical care which not only productionise cost effective medical products but also adopt nearby villages for medical care coupled with education." Excerpts.

Vision for Medicare

A Report on Health Care in India has been prepared by a panel of leading doctors and medical technologists in the country. It reports the typical problems facing us for two decades in the health care and possible solutions. The expert team has identified three major diseases viz. tuberculosis, HIV and water-borne diseases, by next decade as methods to combat the diseases. The other diseases are cardiovascular diseases, neuro-psychiatric disorders, renal diseases and hypertension, gastrointestinal disorders, eye disorders, genetic diseases, accidents and trauma, which need our attention. We should see how the advancement in technology could be put to use to improve the health care system of the country. Such an effort will make cost effective medical technology and devices available and accessible to all the citizens of our country. This will contribute for nation's progress as a strong body and a sound mind are essential to accomplish anything.

The report has brought out multidimensions of health care problems in our country. The vision of providing affordable and effective healthcare to our entire population goes much beyond the capability of any individual, institution or organisation. Technology is an important tool to give fast healthcare and we have to use it. This vision has to become a multi-organisational mission leading to the generation of thousands of goal oriented projects. These projects will have to be supported and nurtured not only by the Government, but also by our industry and philanthropic organisations. The most important ingredient of such a multi-organisational mission will be the leadership decentralised and yet linked together. For example, the academic institutions which do research on various technological systems, will be tools for medical care which not only productionise cost effective medical products but also adopt nearby villages for medical care coupled with education. NIPER has to have partnership with R&D labs and industries for developing indigenous medical care equipment, devices and consumables.

The interfacing between medical science and various other technologies has given rise to numerous techniques both curative and investigative and has provided the research worker with numerous tools to pry into the working of various physiological functions right up to the molecular levels. Developments in bio-technology and molecular biology have now made it possible not only to design drugs for specific properties but also to deliver them to the specific sites where they are most required. Newer imaging techniques have now made it possible to obtain real time images of the various organs at a physiological and biological level and hence the right treatment is possible. Medical research will lead to identify not only the genes that cause disease but also correct the defects through gene therapy. Recent breakthroughs in stem cell research are likely to lead to the regeneration of diseased organs.

The role of genes in heart diseases and stroke is now universally accepted. The apo-B gene is responsible for the cholesterol management in the body. My friend, Dr. B. Soma Raju informs me that as a clinician he is looking toward two major approaches for gene therapy for heart diseases: treating the heart muscle itself and treating veins and arteries. Molecular biology will also have a clear impact on the science and practice of psychiatry in near future.

Molecule to Drug

It is time that we develop a molecule to drug in the country. Humanpower for this is available in the country, but what we need to do is to organize ourselves to attain global standards which are essential if we are to develop a product that is internationally approved. This can be done by obtaining approvals from dynamic health councils and with partnership from pharmaceutical industries in India and abroad to develop the process of converting of a molecule to drug. As this now involves different technologies to work together preclinicals, Phase one and Phase two clinical trials, pharmacologists, Bioinformatics etc we need to develop skills of working together such that all the necessary questions in this regard is answered. Economics, time frame for development and risk of failures is high. A molecule can fail at the fag end of the process. These may be the major reasons for the lack of our country not able to bring about this conversion.

However, in the present scene, globalization, and the west looking forward to cut costs of production without compromising on quality. India with all its thrust in Biotechnology, streamlining of procedural methodologies in obtaining permissions etc has to help in rapidity of such developments, rather than getting lost due to regulatory formalities. Although the governmental agencies reflect to such a mood, industries are yet not convinced of such an action, especially in Biotechnology. Governmental agencies thus should work together to achieve this, especially in the area of drug discovery to production. Our specific aim is to focus on anticancer, antidiabetic and immunomodulator compounds.

Intellectual Property Rights

We are now fast moving into the world of Intellectual Property Rights and Patents under the new international regimes which are unfolding before us. To make sure that we do not lose out to any of the IPR issues, it will be necessary to properly document all our research work and to put in our claims for patents whenever we feel it worthwhile to do so. NIPER should become the repository of IPR related activities not only to ensure that we protect our Intellectual Property of the modern times, but also to ensure that our repository of traditional medicinal knowledge is properly documented and can be put to strategic use to prevent IPR piracy.

Information Technology

The need of properly harnessing all the powers of information technology is very important. IT has become very relevant to areas like pharmaceutical research because of the enormous amounts of data which has to be mined to arrive at some conclusions. By way of example, I would like to mention about the Human Genome Project on which a massive amount of data has started to be generated. The amount of data processing required is so huge and specialized that the new branch of 'bio-informatics' has started developing. As the volume of data generated grows, so does the demand for faster data processing technologies. Thus, to arrive at some destination in the area of bio-informatics', it is very necessary to deploy powerful information and communication technologies so as to be able to get a hold on gene sequences, expressions, protein structure delineation and population genetics etc. This all means that organizations like NIPER should be keen to study and develop the area of Information Technology particularly bio-informatics and deploy it widely to make the best use of it in the pharmaceutical sector.

Tropical Diseases

It is generally felt that much work is not being done abroad on tropical diseases like malaria, typhoid and tuberculosis etc., because there is a feeling that multi-national drug companies do not hope to find high profit markets for their research products. India has to take the lead in these areas to remove the pain of poor masses of the tropics, which suffer from these diseases.

HIV/AIDS Vaccine

Apart from these tropical diseases another disease is getting added very quickly and that is of HIV/AIDS. Efforts are being made all in the West to develop not only the retro-viral drugs for combating the disease but also to develop a vaccine for the prevention of HIV/AIDS. Here again, countries like India would have to fend for themselves because, I am told, that the AIDS virus which is prevalent in our country is of a different strain from that which affects the West and Africa. As such, our research institutes and professionals would require to develop their own drugs and vaccines to combat our strain of AIDS/HIV virus. As far as India is concerned, I understand that the anti vaccine for HIV/AIDS is in the advanced stage of development and getting ready for clinical trials. This programme needs highest priority from multi work-centres in a mission mode. Success in HIV/AIDS vaccine will indeed be a major milestone for the nation and also for other countries.

MBA Programme

I am very happy to see that NIPER is keeping abreast of the developments which are taking place in the market and to this effect, they have introduced an MBA programme in Pharmaceutical Management with effect from 2003. It is heartening to note that this programme has been developed by deployment of in-house academic and professional expertise and is indicative of the forward looking and market-oriented approach of NIPER. Here, I would also like to add that Pharmaceuticals is one industry in which we need to have a very strong research-industry linkage. For this, one must believe in 'industry-oriented' and 'industry-driven' research. We need not be overtly worried about basic research and research for the sake of research. After all, to be alive in the educational market, our Universities and institutes have to develop a strong industry-research orientation which will not only provide them a linkage with the market, but will also give an element of financial independence and autonomy to organizations like NIPER.

Conclusion

The pharmaceutical business in the WTO environment will have to be competitive. Competitiveness springs from the technological strength. The research and drug design, development and acceptance for introduction is indeed a big mission. Particularly the institutions like NIPER has to understand the challenges—design to drug development and marketing. Here the most important component of success comes from creative leadership. In the present environment we need leaders whose leadership styles which move from commander to coach, manager to mentor, from director to delegator and from one who demands respect to one who facilitates self respect. ❑

(Contd. from page 14)

institutions like IIMs, XLRI which turn out excellent MBAs *in the country may not be in a position to train* MBAs to cater to the specific requirements of industries exclusively. This is due to the present structre and the functioning methodology of IIMs, etc. Obviously, the technology oriented institutions like IITs would be in far better position to prepare curriculam and introduce courses in management, catering to the requirements of highly specialized fields.

The problem-solving techniques and generalist nature of engineering open up a plethora of opportunities for employment for engineers outside the industry. MBA is a popular choice for engineers to add in-depth business knowledge to a technical background. According to senior analysts, as engineers, they have a strong background in process, economics, which gives them the big picture of a business process. There are significant benefits to engineers who can align the internal capabilities of their process, design, and products with external market opportunities.

Conclusion

The management courses for industry have to necessarily focus in various areas such as technology development, technology acquisition, custom synthesis, R & D management, project identification, export trade, substitution possibilities, etc. Curriculam for such courses have to be carefully introduced and developed and a lot of thoughts have to go into the task. Unfortunately, most of the MBAs passing out are employed by industries, particularly by the multinational companies, only for marketing and trade functions. Rarely, the services of MBAs are used for production management or R&D planning and similar functions that require integrated approach. Obviously, the industries think that the MBAs in the present pattern of education are not adequate to straight away take up overall management positions. This situation can be rectified only by turning out MBAs with focus on particular sector. The present time is ripe and appropriate to introduce MBA programmes exclusively to meet the requirements of the industries only. ❑

CAMPUS NEWS

National Seminar on WTO and Higher Education

A one-day National Seminar on 'WTO and its impact in Higher Education' was organized recently by the Shanmugha Arts, Science, Technology and Research Academy (SASTRA), Thanjavur. Prof. V.N. Rajashekharan Pillai, Vice Chairman, University Grants was the Chief Guest of the occasion. While delivering the inaugural address he said that it was high time for the universities and college to review their performance and improve their quality. He insisted upon a governing structure with academic autonomy coupled with accountability for all universities and colleges in India. There are nearly 50,000 colleges and most of them did not get recognition from the UGC as they have not satisfied the minimum requirements stipulated by the UGC for offering degrees. Refering to the history of Nobel Prize winners in science the UGC Vice Chairman quoted many of the scientists, who won the prizes, did research in universities and taught all disciplines including engineering, medicine and basic sciences. About 60% of the students who were guided by such scientists are Indians and it was an indication of quality of Indian students.

The Dean, Planning & Development Shri S Vaidhya Subramaniam, while delivering the welcome address said, "India was believed to be a land of opportunities but looking at the present scenario, it seems India is becoming a land of opportunists. The recently concluded Summit at Cancum can rightly be termed as a successful failure, failure for the West and success for the rest. Observing the reaction of the Indian audience to the WTO, it would be surprising to know that the India welcome with applause when it signed the WTO Treaty during 1996. On the contrary, diametrically opposite view has emerged from the Indian minds after the failure of the Cancun Summit. The Indians feel elated with the fall of the Cancun Summit. The reason can be attributed to the fact that the Indian mind in totality did not know the WTO in its entirety.

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It is not that Indian institutions are afraid of the foreign universities. But the point is the overnight invasion of foreign universities leaving little or no time for Indian institutions to react. It is therefore necessary that a level play field is created before foreign universities enter the country. It is well known that 90% of higher education is rendered by private institutions but it is also commonly known that the private institutions do not enjoy freedom when compared with private institutions outside India.

Prof A Rame Gowda, formerly Chairman, AICTE, spoke on the topic 'Higher Education in India-Present Scenario'. Dr A Gananani, formerly, Executive Chairman, National Assessment and Accreditation Council and present Vice Chancellor of Pondicherry University gave an address on 'Higher Education under WTO Regime Issues & Concerns'. Dr Anandakrishnan, Chairman, Southern Regional Council of AICTE, delivered a lecture on 'Public/Private Initiatives'. There was also a panel discussion with Sh.K. Aludiappillai, formerly Vice Chancellor, Madurai Kamaraj University as Mediator. Sh. S Gurumurthy, Eminent Columnist and Economist addressed the valedictory session. Earlier, Prof R Sethuraman, Vice Chancellor and Prof R Kandaswamy, Registrar addressed the guests. Prof K G Seshadri, Dean, Humanities and Sciences proposed a vote of thanks.

Scheme for Providing Central Assistance for Cultivation of Medicinal Plants

The Indian System of Medicine viz. Ayurveda, Unani, Siddha and also the Homoeopathy system predominantly use plant based raw materials in most of their preparations and formulation. The credibility of these systems, thus mainly depend upon the use of genuine raw materials in the manufacture of drugs of these system. In all, about 1100 medicinal plants are estimated to find regular use in the Indian System of Medicine (ISM). Of these, 500 medicinal plant are most commonly used in preparation of ISM & Homoeopathy drugs. The main source of availability of these medicinal plants is forests where these grow wild. As a result of continuous exploitation of these plant in forests and absence of regular developmental programmes in the forestry sector, a number of species have become vulnerable to extinction due to loss of population and also unscrupulous collection. This also leads to a gradual erosion and ultimate loss of vulnerable genetic diversities of the economic plants in India.

There is an ever-growing demand of medicines of Indian System of Medicine and Homoeopathy both for internal consumption and export purposes. This has resulted in a spurt in the number of pharmacies in these systems which are now about 10,000 scattered throughout the country. This has also created a problem of supply and availability of sufficient quantities of medicinal plants for manufacture of genuine drugs. In order to meet this situation, measures are needed to promote the cultivation of medicinal plants. There is also a need to create greater awareness amongst the population as a whole and particularly amongst the farmers about the medicinal and economic value of these plants so that this heritage may be wisely used and exploited, and at the same time conserved and perpetuated through judicious management for future generations. In view of the above the Department of Indian System of Medicine and Homoeopathy, Ministry of Health and Family Welfare implemented a Scheme for Development and Cultivation of Medicinal Plants during the year 1990-91. Under this scheme Central assistance was provided for setting up of Medicinal Plants Gardens for growing of identified Medicinal Plants used in Indian Systems of Medicine and Homoeopathy.This assistance was provided to organizations.

As per original pattern of scheme, only the organizations directly controlled by the Government (Central/State/UT Govt.), were eligible for assistance. Further, utilization of minimum 5 acres land was a necessary requirement. In view of this the scheme could not cover the Colleges of ISM&H in Govt. Sector which could not spare 5 acres land and also the colleges categorized as non-government.

The objective of the Scheme is to augment the production of crude drugs of plant origin which are in greater demand and mainly used in preparation of drugs of ISM and Homoeopathy by providing central assistance for cultivation and development of medicinal plants for the purpose. Central assistance will be provided to the organizations as indicated under para (III) below for establishment of herbal farms for cultivation of scarce and identified medicinal plants/trees required by the drug industry of ISM and Homoeopathy which are in a great demand but are short in supply. It will also augment the efforts of growing those medicinal plants, which are at present imported but have the potential for cultivating indigenously.

The institutions/bodies eligible for assistance are

- Government/semi-government organizations in states/Uts such as Government pharmacies and colleges of ISM and Homoeopathy and public sector undertakings (PSUs) etc.
- Registered autonomous bodies, statutory organizations (directly controlled by government) like Research Councils, Agriculture/Ayurveda/ Medical Universities, Universities/Colleges having Post-graduate departments and organizations like archaeological/botanical survey of India and local municipal bodies.
- Registered institutions under Central/State/UT Governments.
- Non-government colleges of ISM and H which are recognized by CCIM/CCH for last five years, aided by State/UT Governments and have received grants earlier under the schemes of Department of ISM&H.

Central assistance shall be released on the recommendation of Committee consisting of Joint Secretary, Department of ISM&H; Dy. Secretary (Internal Finance) and Advisor (Ayurveda)/ Advisor(Honoeopathy). Applicant institutions will be required to furnish the requisite information in the prescribed proforma. Central assistance under this Scheme would be provided for the following purposes:

- Fencing and land shaping;
- Purchase of essential machinery/equipment/ implements etc;
- To create/improve irrigation facilities, e.g. for construction of well, tube well, tanks etc.
- Construction of ordinary sheds for procurement, storage, drying etc. and
- Miscellaneous expenditure on items like obtaining technological know-how, and
- Literature etc.

The applicant institution may send two copies to the State/UT government. one copy to the Director (ISM), Deptt. of ISM&H, Ministry of Health & Family Welfare Red Cross Building, New Delhi for advance scrutiny. For further details contact Shri S B Sharan, Deputy Secretary to the Government of India, Ministry of Health & Family Welfare, (Department f ISM& H), I R C S, Annexe Building, Red Cross Road. New Delhi.

IATLIS National Conference

The XX IATLIS National Conference is being organized by the DLIS, University of Madras, Chennai during 21 - 23 November, 2003. Prof. K. S. Raghavan, Head, DLIS, University of Madras is the Organising Secretary. Prof. Harsha Parekh, SNDT Women's University, Mumbai is the Director of the Conference. Main theme of the Conference is Globalization of LIS Education. The sub-themes are:

- Identification / Study of LIS Education Needs and Practices at Global level

- Informal and non-formal LIS Education
- Global Marketing of LIS Education
- Market Orienting of LIS Education
- Market Oriented Reorganization of LIS Education
- National and International Information Access Methods and Practices
- Comparison of Global and Local LIS Programmes
- Information Needs and Information Seeking Strategies
- Standardization and Cooperation for Globalization of LIS Education
- E-learning in Globalisation of LIS Education
- Collaboration of Education and Research Activities-national and International level-Inter institutional collaboration and consortia approach
- National and Transnational Information Policies
- Information Technology in Globalisation of LIS Education
- Teaching Aids / Tools / Techniques / Infrastructure for Globalization of LIS Eduaction
- Curriculum Innovations
- Design and Development of Curriculum in the context of Globalization
- Faculty Empowerment and skills up-gradation.
- Instructional Management
- Practical Training/ Exchange of Teachers and Students Internship for appropriate Human Resource Development
- LIS Education to meet the changing Environments and Manpower Requirements in Modern Libraries
- Role of Publishers and Book Sellers in Globalization of Education
- Accreditation and Globalization

Papers on the above theme and sub-themes may be submitted by interested scholars to the General Secretary, IATLIS. The paper should not be more than 3000 words. For further details contact General Secretary, IATLIS c/o Dept. of Library & Information Science, Osmania University, Hyderabad, 500 007.Ph No.27682290, e-mail - iatlis@yahoogrps.com

INFLIBNET Regional Training Programme

Maharshi Dayanand University Library, Rohtak in collaboration with INFLIBNET - an Autonomous Centre of UGC conducted a five-day 'INFLIBNET Regional Training Programme for Library Automation-IRTPLA 2003' for middle-level librarians recently. Dr. Rajbir Singh, Professor of Psychology, MDU, Rohtak, inaugurated the Programme. Dr. Ajit Siwatch, Deputy Librarian was the Course Director. Twenty-three librarians from the State of Haryana and attended the programme.

The Programme was organized with the basic objective of inducing the librarians into the use of latest technologies such as computing power, networking, database development and management, internet and its uses and e-journals. Experts with rich backgrounds in these technologies delivered lectures and imparted practical training to the participants. Two INFLIBNET scientists, namely, H G Hosmani and R Patil imparted training to the participants in the use of SOUL - a library-oriented software developed by INFLIBNET. Sh. Dharamveer, Librarian, Shri Ram College of Commerce, New Delhi deliberated on 'Planning for Library Automation'. Dr. R S Chhiller, Head, Department. of Computer Applications, MDU, Rohtak delivered a lecture on 'Basics of Networking and Security'. Dr. Nasib Gill from the Department. of Computer Applications, MDU, Rohtak discussed about internet technology. Sh. Satish Malik and Sh. Rajive Pateria, Asstt. Librarians at MDU and CCSHAU, respectively took the reigns to initiate the participants in the use of internet services, particularly as e-mail, etc. Prof. Prem Singh, University Librarian, CCS Haryana Agricultural University, Hisar discussed 'Database Development and Administration in Libraries' and 'e-journals'.

Dr. Ajay K. Rajan, Registrar, MDU, Rohtak was the Chief Guest of the valedictory function while Prof. Prem Singh presided over the function. Dr. Rajan said that the use of library and its strength in terms of collection and services are indicators of the quality of education which its parent body provides. He further said that no educational institution can think of its existence without a rich library. Prof. Prem Singh advised the librarians that they should play proactive role in providing library and information services to their clientele. In the changing scenario, librarians should exploit the potential of information technology to take the libraries to the doors of the users. Dr. Rajbir Singh, while proposing the vote of thanks, was appreciative of the role of IT in shaping the library services. He said that library is a temple of learning where an educationist steps in to quench his thirst for knowledge.

Jagriti--2003

Bharati Vidyapeeth's Institute of Management & Research, New Delhi organized 'Jagriti 2003' a day-long Corporate Level Case Presentation Competition to create awareness towards quality circle. The delegates for the Competition were from renowned companies Hero Honda, Parle Biscuits Pvt. Ltd., Asahi Glass Ltd., Sandhar India Ltd. The idea behind the competition was to create awareness among the students about the practical aspects of quality consciousness and quality related problems. Quality circles from various companies presented their practical cases and the solutions that they came up with in real-time. The speakers emphasized the importance of quality awareness amongst the public and the responsibility on the part of the corporate to deliver the same.

With the advent of globalization the concept of quality has received a premium status. This is possible only when quality consciousness is introduced in our industries by voluntarily constituting quality circles at various levels. Students are advised to work with an objective in mind and pursue it relentlessly. Knowledge acquired should be applied in rendering service to the society and to the nation at large. Director of the institute Dr. S S Vernekar highlighted the institute's achievements in organizing various national level seminars, which has met the exacting industry requirements.The Director emphasized the fact that quality is not attained by accident and cannot be attained in a day, it has to be evolved and implemented on a daily basis by rigorously working on it.

The Keynote Speaker Mr. Raja Shekharan M.D. QCFI elaborated the concept of quality circle right from its inception in Japan and its growth in different parts of the world. Mr. Ajay Bajpayee, MD-ICS highlighted that quality circle helps in identifying and diagnosing the problems at the shop floor level instantaneously. Delegtes from QCFI acted as judges of the programme. Asahi Glass India Ltd. was announced the winner of the daylong corporate level competition 'Jagriti 2003' followed by Metzeler Automotive Profile Pvt. Ltd. All the winners along with the participants were felicitated with certificates and souvenirs. Prof. S N Haque coordinated the event and accentuated on the fact that such summits add on to the overall development of the future managers who would be ruling the industry. Faculty members and students from various management institutes in and around Delhi participated in the summit.

Workshop on Accreditation and Certification of Libraries

The Society for the Advancement of Library and Information Science(SALIS), Coimbatore Chapter organized a one-day Workshop on 'Accreditation and Certification of Libraries' at CSI Bishop Appasamy College of Arts and Science, Coimbatore recently. Mrs. Mirnalini R David, Principal of C S I Bishop Appasamy College of Arts and Science gave welcome address. The inaugural function was presided over by Mrs. Susheela Williams, Secretary, C S I Bishop Appasamy College of Arts and Science. Dr. S Sivasubramanian, Vice Chancellor of Bharathiar University, gave the inaugural address. In his address he said that the Total Quality Management and Knowledge Management are the need of the hour for the libraries. In future all the Library and Science professionals should become knowledge managers. Mr.T Stephen, Programme Coordinator of the Workshop and Librarian of C S I Bishop Appasamy College of Arts and Science proposed a vote of thanks for the inaugural session.

The Technical Sessions of the Workshop were handled by the Resource Persons.Dr. B Sampathkumar, Principl, P S G College of Arts and Science, Coimbatore handled the Session on 'General Aspects of Accreditation Certification of Libraries'. The Session on 'NAAC' was handled by Dr. S Srinivasa Ragavan, Librarian, NAAC, Bangalore. Dr. V Harish Chandra, Librarian, Central Library, Indian Institute of Madras (IIT-M), Chennai handled the Session on 'ISO'.

The main objective of the Workshop was to give a clear insight about Accreditation and Certification to the libraries with reference to NAAC and ISO. About 70 Library and Information Science professionals from various parts of state attended the Workshop. The general body meeting of Society for the Advancement of Library and Information Science(SALIS), Coimbatore Chapter was held on the occasion which was presided by Dr. M Kanakaraj, Librarian, P S G College of Technology, Coimbatore and President,SALIS Coimbatore Chapter.

Seminar on PC Serial Communication in Industry

A one-day State level Seminar on 'Implementation of PC Serial Communication in Industry' was organized by IT Cell of Rosary College of Commerce and Arts, Navelim recently. The Seminar was conducted by Mr. Oscar Mascarenhas, Deputy Manager and Head of Systems Department, Goa Carbon Limited, Cutorim, and Goa. Prof. P S Zacharias, Vice Chancellor of Goa University inaugurated the Seminar.The Vice Principal Savio Falleiro was the co-coordinator of the Seminar. The Principal, Fr.(Dr.) Walter de Sa referring to India's achievements quoted Dr. R A Mashelkar that we manufacture everything from pins to missiles. He further said that India had all the technology required to accelerate country's growth, adding that IT not only stands for Information Technology but also for 'Indian Talent', as pointed out by Dr. Mashelkar, that India possesses in achieving the status of superpower in the world. He encouraged the participants to follow the vision of the President of India, Dr. A P J Abdul Kalam to 'Think Big and Dream Big'.

The Chief Guest, in his address, urged the participants to stress on the need that every individual must create a space for oneself and to focus on the relevance of every individual to society in building the nation. He explained the significance of scientific function of ?x (delta x), a small part of x, and the role it plays in achieving the functionality of factor X. He pointed out that the seminar was ?x , and the role it can play in enhancing IT education in society.

Mr. Oscar Mascarenhas, the resource person, explained the Calcination Klin Operation at Goa Carbon Limited and the supervisory control and data acquisition (SCADA) for Calcination Klin operation data acquisition. The terminology used in serial communication was briefly discussed. The protocols RS 232 and RS 485 used for serial communication were discussed at length. RS 232 is a point to point communication protocol and uses 2 types of connectors, one using 25 pins and the other using 9 pins, can be used to communicate over a few meters, whereas RS 485 is multipoint communication protocol used for master slave communication and can be used to carry data upto 1000 meters range. The RS 485 remains in 'receive mode' to avoid data collision.

The MODBUS protocol is used to switch over control and signal data between RS 232 and RS 485 communication media. The MODBUS protocol defines the message structure for transmitting data, how errors are to be detected, reported and rectified, and processes to request access and response from other devices. A comparison of various transmission media gave an in-depth insight to the participants about the advantages and disadvantages of each medium. Visual Basic controls available for serial communication were demonstrated. The structure of SCADA software using Visual FoxPro was explained and the significance of Process Controller in MICON S32 was highlighted. Finally, the use of serial communication in PC operation in Road weighbridge application and Employee time keeping and attendance using bar coded card application was debated upon.

Nearly 30 lecturers from various colleges participated in the Seminar which provided a platform for sharing and exchanging views and strengthening ties among themselves.The valedictory function was presided over by the Principal, Fr. (Dr.) Walter de Sa and Mr. Vincent Thomas proposed a vote of thanks.

Student Management Games– 2003

Seventh AIMA-INFOSYS Student Management Games - 2003 was organized by All India Institute of Management, New Delhi in association with Prestige Institute of Management and Research, Indore recently. AIMA has been organizing SMG since 1997. 40 teams from 20 institutes participated in the Games this year viz. ICFAI, Mumbai; ICFAI, Bangalore; ICFAI, Chennai; Baba Saheb Gawade Institute of Management, Udaipur; KLS Institute of Management, Belgaum; RL Institute of Management, Madurai; Faculty of Management Studies. College of Materials Management, Jabalpur; Symbiosis Institute of International Business, Pune; Symbiosis Institute of Management Studies, Pune; CRIM, Bhopal; DBIM, Surat; Prestige Institute of Management,Gwalior; Prestige Institute of Management, Dewas; IBMR. IPS Academy, Indore; IIPS, Indore; IMS, Indore and Prestige Institute of Management and Research, Indore.

The Event was inaugurated by Mr. B K Jog, GM, BSNL, Indore. Dr. Upinder Dhar, Director, PIMR highlighted the importance of SMG in enhancing managerial skills. Prof. Smriti John, Coordinator, SMG-2003, presented a background of the game since its inception. The chief guest, Mr. B K Jog in his speech emphasized on the importance of training and motivation in improving organizational effectiveness of the establishments like BSNL. Ashwin Vyas of MBA III made a brief presentation about PIMR. Prof. Amrita Thakre proposed the vote of thanks. Mr. S Sambre, Deputy Director and Mr. S C Tyagi represented AIMA on the occasion. Mansi Juneja of MAPRM I conducted the session.

Forty teams segregated across four groups underwent five rounds of rigorous play along with a trial round during the event of two days. The event came to an end with the valedictory session held on September 17, 2003 at 5.00 pm with Mr. Rajesh Agarwal, Chairman, Soya Procesors Association (SOPA) as chief guest. In his address, he emphasized upon the importance of ethics in an organization as well as an individual's life. He congratulated the winners and appealed to all the participants to keep working hard throughout their lives. Prof. Smriti John, Coordinator SMG-2003 presented a brief report on the proceedings of the two days. Participating teams gave a motivating feedback. Mr. S Sambre declared the results. Four teams from each group qualified to represent the Western Region in the Grand finale at New Delhi on October 10, 2003. These teams were from ICFAI, Mumbai; Prestige Institute of Management, Dewas; Symbiosis Institute of International Business, Pune and Prestige Institute of Management and Research, Indore. The two overall winners of the game were Prestige Institute of Management and Research, Indore and Symbiosis Institute of International Business. Pune and were declared as Winner and Runner Up respectively. Cash prizes of Rs. 10,000 and Rs. 5,000 were given to the Winner and Runner Up teams respectively besides trophies for their institutes and individual team members. Mr. Davish Jain, Vice Chairman, Prestige Education Society and Managing Director, Prestige Group of Industries proposed the vote of thanks.

National Symposium on Architecture

A National Symposium on Architecture was organized recently by the MEASI Academy of Architecture, Chennai and the Indian Institute of Architects, TN Chapter, Chennai. Prof. Anandakrishnan, Chairman, All-India Council for Technical Education, Southern Region was the Chief Guest. While delivering his address, he suggested that the ILA set parameters to grade architectural institutions, at least in Tamil Nadu. He asked architects if they had contemplated on the size of architectural education in the country, and if they had an objective projection for its growth. Currently, there are a little over 100 architectural schools in India and about 25,000 architects. Dr. Anandakrishnan also stressed on the need for registration of architects to eliminate quacks and ensure standards. Other participants called for setting up a national board of studies for architecture and a common all-India entrance examination.

Tracing the growth of architectural studies in the country, Prof. P R Mehta, President, Council of Architecture, pointed out the lack of discipline in architectural practices, which led to unplanned constructions and poor urban growth. Speaking on architectural education, he said that the patrons of architecture had changed. To stress the point and emphasise that architects had to be aware of new realities, he referred to the Taj Corridor controversy in Uttar Pradesh. The focus earlier was on creation of value, now it is on encashment of value; the rulers at that time wanted excellence in quality and design, now they want excellence in administration; the selection then was by quality, now it is by lowest bid. To ensure minimum standards in architectural education and practices, Prof. Mehta suggested setting up architectural universities and even a dedicated ministry of architecture like in Haryana.

News from Agricultural Universities

Farmers' Fair at Pantvarsity

A four-day All India Farmers' Fair and Agro-Industrial Exhibition was held recently at G B Pant University of Agriculture & Technology, Pantnagar. The Chief Guest of the function was His Excellency the Governor of Uttaranchal, Shri Sudarshan Agrawal. Sh. Agrawal made a visit to the Fair before attending the function. The Governor, after giving away the prizes, addressed the gathering of the farmers, students, scientists and the representatives of the firms participating in the Fair and said that it is like a Krishi kumbh which is organized after every six months as against the Kumbh of Haridwar organised once in six years. He hoped that such fairsshould be organized in other parts of the State also so that those famers who couldn't reach Pantnagar could also be benefited. He was happy to learn that about 30 per cent students in the University are girls which will lead to emancipation of women in the State who are the main contributors in the development of State agriculture too.

The Governor also mentioned about the Him Jyoti Foundation started by him providing scholarships to the poor and intelligent student and told that four students of Pantvarsity are also among the 13 beneficiaries of this scholarships. He also sold the memento, presented to him by the Vice Chancellor, for Rs. 51,000 to L&T John Deer Tractors for contributing to Him Jyoti Foundation. Shri Agrawal gave away the prizes to the winners of different category of stalls. The 'Overall Best Stall' trophy was given to M/s L&T John Deers Tractors, Kashipur.

The inaugural address was delivered by Dr. Indira Hridyesh, Minister for Science and Technology, Uttaranchal. She said that the farmers' fairs can revolutionize agriculture as these are the best medium for disseminating new technology to the farmers. She also said that in the changing agricultural scenario world-wide, such fair can be utilized to give a new direction to the Indian agriculture. She emphasized the need of developing new technologies as per the need of small and marginal farmers. She was of the view that Pantnagar University scientists have excelled at national and international level and now they should lead the State and the Country in the field of agricultural biotechnology which has great scope of making agriculture highly productive and profitable.

Tilak Raj Behar, Health Minister, Uttaranchal while visiting the Fair said that Pantnagar University is an important component in the development of the State and its responsibilities have increased manifold after the creation of the new state. The University is fulfilling these responsibilities very well he added. The Vice Chancellor, Dr. P.L Gautam, speaking in the closing ceremony, said that though the area of responsibility of the University has decreased, the visit of farmers from far-flung areas and other states like U.P., M.P., Punjab, Bihar, Haryana and the neighbouring countries Nepal and Bangladesh in this fair reminds us of our national and international responsibilities. He said that the scientists of the University will have to come true to the faith reposed by the farmers of every nook and corner of the country.

Earlier, the organizer of the Farmers' Fair, Dr. Mahendra Singh, Director Extension told that a record number of stalls of 133 firms participated in this fair. There were 146 big and 225 small stalls besides 18 stalls of the Colleges and other units of the University. He also told that more than 20,000 farmers visited this fair. The Breeder and Certified seeds of the University were in great demand even after all the available seed of various crops were sold off. The Horticulture Show and Competition and Animal Show, Vichar Gosthi and special lecturers were also organized on the occasion.

Vote of thanks was proposed by Dr. Basant Ram, Director, Experiment Station, Pantvarsity. ❑

News from Abroad

COL's Knowledge Series

The Commonwealth of Learning (COL), Vancouver has initiated a series guides on distance education called 'Knowledge Series'. It is a sequence of single-subject, start-up guides on topics in distance education practice and delivery for practitioners, authored by experts in the field. Approximately four to six guides are published about once a year. COL invites proposals for its Knowledge Series from potential authors. Potential topics open to authorship, for 2004 publication, include:

- Managing Student Records/Progress in Distance Education
- Producing Gender Sensitive Learning Materials
- Practical Applications for Mobile Learning (m-learning) in Developing Countries
- Quality Assurance in Open and Distance Learning
- Tutoring for Open and Distance Learning
- Using Information and Communications Technology (ICT) in Agricultural Extension

The authors may obtain the current writer's guidelines, which include specific information per title before submitting a proposal. Previously published authors in the series also may submit proposals on newly offered topics. The final length of each guide is 3,000 - 3,500 words. A standard honorarium is offered for all authorship contracts. COL retains copyright of the final published product; authors are credited and retain moral rights. The Knowledge Series is freely available for non-commercial use, with credit to both the author and to COL. Proposals must be received by November 20, 2003. Submissions via e-mail attachment are preferred Proposals via regular mail or fax will be accepted if received before the deadline. For further details contact Dr.Grace Chin, Editor, Knowledge Series at: grachi@telus.net or by mail or fax to Dr. Dave Wilson, Communications Manager, Commonwealth of Learning (Col), Suite 600 - 285 West Broadway, Vancouver, BC V6H 3X8 CANADA, PH: +1.604.775.8200 /, FAX: +1.604.775.8210, WEB: www.col.org / E-MAIL: info@col.org. Previously published titles are available at: www.col.org/knowledge

AIU News

AIU Participation in BCCI Annual Meeting

Prof. Dayanand Dongaonkar, Secretary General, AIU attended the 74th Annual General Meeting of the Board of Control for Cricket in India (BCCI). In the meeting he discussed about the scope of uplifting and enriching the Cricket Game in Indian universities and hoped that the relation of BCCI and AIU will further strengthen. Sh. Jagmohan Dalmiya in his deliberation about the issue promised to revitalise the combined university team to promote Cricket through Vizzy Trophy; to have involvement of different State chapters with university activities; and to have combined university team playing with international teams. He assured to provide overall support for university Cricket and promote the cause of Cricket for the university youth.

COMMUNICATION

Becoming Myself

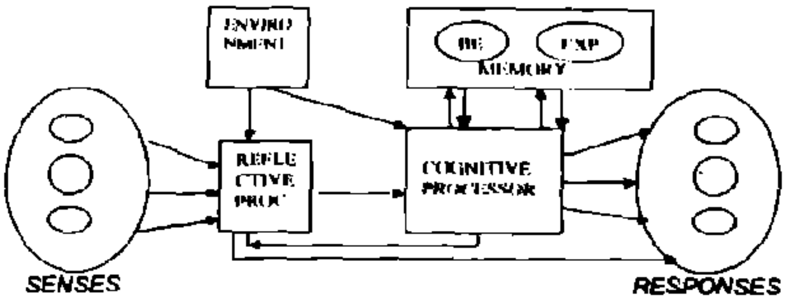
When you are in college, it seems every one has some advice for you. From Professor to Technician everyone related their own experiences or what they know about college. They talk about courses, competition, selection and success. They tell about test being hard, you being on your own. They talk about fraternities and adventures. College being wonderful. But they forget to mention one thing - "Education is what begins when you leave college"—The major academic difference between college and life. An education is not just the means to live life.

Life, on the surface, seems hauntingly like college. Friends, colleagues, relatives surround us. We talk about ideologies and they patiently listen to an educated. But how efficacious are we when we silently consent to lurid new forces. I am reminded of the gentleman who helped my daughter resume her journey when she, in excitement to meet me, boarded the train on a post-dated ticket. Why had he to perpetuate himself as an unsung hero? Why couldn't he be like me who once while traveling, silently watched the fellow passenger be charged for standing in the corridor? Who on the debate of Hindu secularism like India's silent majority neither could identify the shrinking arena of intolerance towards other religion. Nor, pitch in when others talked of shattered innocence of girl trafficking or speak on the crux issue of children employed in firework industry, working for thirteen hours during the peak season. Why couldn't I react to such atrocities? Was it that I was insensitive to the happening around me or that I didn't know to question myself? Perhaps both.

Education cannot become just the crystallized affair of individual efflorescence. It needs to incite the reposed inner consciousness in us. A change, that can entice to become myself that is attaining peace at individual level to understand the world unity. Kalam categorically asserts: The four prolonged strategy for the creation of standard human beings through which the unwanted conflicts and terrorism, which the world is facing in the present scenario to deal with are; education with value system, religion graduating to spirituality, economic empowerment and responsible judiciary. To foster this true spirit of humanism, there is a need to prioritize Critical Thinking. A simple thing - to live a life, we will have to learn to think. Become an independent thinker, who can be sensitive to issues, formulate questions, use logical thinking, construct an argument, and arrive at a decision within a moral framework. Education, when is concerned with developing one's interest, appreciation and attitude, how can one remain affluent to the touch of the sprit of humane relationship? What's worthwhile is therefore, recognizing our identity as a human being by making a mental effort to understand the happening around us. Be sensitive to people and environment around us. The essential meaning of education then becomes the commitment to involve thinking, knowledge and experience to understand the global scenario.

Admissibly, education can cater to the ever-divergent avenues of individual excellence in keeping with the trends and tendencies, by prioritizing critical thinking. All avenues of excellence in education are indeed, inculcating potency for effective sensitization. Plurality in knowledge and experience awaits a furtherance of broadening vision and widened outlook - the need for coping with individuals' understanding of altruist, world mindedness and attitude towards peace. Our education practice, as it stands today, is a subversive activity. Education, to be meaningful, must teach man to reason out things, understand their interconnections, grasp the logic of social change and then use this knowledge, not as an abstract to ruminate and ponder over, but as a concrete social force to transform the world. By being party to this kind of practice where thinking is emphasized, an academician exercises his freedom and affirms his humanity.

If we reflect on the mental process from Sensitization to Rational Action we find several caveats are in order (adapted from Leon Felkins' model). First off, the mind is not likely broken into blocks like the drawing would suggest but instead seems to be a continuous and overlapping in function. That is, the reflexive processor, the cognitive processor, the memory, and much more are really quite blended with each other unlike the computers we humans build which are composed of discrete sections. Nevertheless, it is useful to break the mind into components to further the process of understanding it.



MENTAL PROCESS (FROM SENSITIZATION TO RATIONAL ACTION)

The three inputs on the left represent all the 'senses'; vision, hearing, touch, etc. The 'reflexive processor' receives these sensations and acts upon them, either by reflex action or by providing a sensitization to the 'cognitive processor' or both. On interpretation of our sensitization the cognitive processor may act on, in various ways, or do nothing at all. The block called environment represents all the external inputs that affect the operation of the two stages of processing. Obviously, our background, impact the performance of these processors. Lumped with this obvious factor are other environmental factors such as noise, room temperature, the mood of the individual, and everything else that is going on around the individual at that instant and some period before. It should be noted that not only are the processors affected, but also the connections between the processors - the flow of data. The memory block is shown with two major components, experience and beliefs. The /cognitive processor will check with memory before making a decision on any action. Finally notice the backward connection from the cognitive processor to the reflexive processor. This represents the fact that our emotional responses are modified somewhat by our state of mind.

At this point we should reflect on how senses, beliefs and experience fit into the big picture, sensitizing each individual to adopt a corresponding rational action.

And here come the picture of the 'free will' issue; a freedom to choose our ends. Hence if our sensitization is increased though external input that could change our beliefs, perhaps our response (final output) towards human society, plants, animals as well as recognizing ourselves could be refined. And this external input could be provided though exposure to thinking procedure.

We would say, we know thinking so, why the need to learn the skill? True, education aims at fostering thinking, but teaching thinking is mainly confined to acquisition of information, retention and reproduction of facts. In this rapid changing world it is not enough to give information, as information soon becomes out dated. Rather there is a need to teach constructive thinking skill deliberately and explicitly. Thinking when learned as a skill empowers learners in wider application to the world outside the classroom. Teaching of thinking should be designed not just for assessing learning potential, but also to trigger insight. The stages incited thinking ability can be as follows;

Firstly, applying understanding on a new acquired *information or in a new situation. For example, If fishes'* genome were found to be similar to the genome of human species, what controversial, negative and beneficial aspect of research would be brought to light? Such problem will combine various aspects of prior learning and often be more complicated. This type of question begins our journey as a thinker. While thinking its not enough to merely follow the mental paths of others; we must demonstrate our understanding of an idea however unfamiliar.

Secondly, there is a need to analyze the information. To trace the cause effect relationship, an attempt to determine why certain event occurred. Science class drills us to obtain the answer of why, and not just what. It means investigating each idea and aspect relating to it, as a whole. Analytical questions refer to comparison as well as contrast among several ideas, works, and theories and then determining the answers; not just one right answer. The process is not mere reflecting the content, rather its usage of thinking ability to explore patterns. An answer, that is an extension of application and analysis of the prevalent situation. Further argumentation based on available data, is required to defend the sorted out idea. Learning is liberating, not merely by relieving us of ignorance, but by supplying us with understanding and insight, with knowledge of reality in which, and against which, we form our sense of self. Therefore the themes of our curriculum must pertain to the issues of the students unfolding consciousness. The search for reverence to one's own concerns, pursued self-consciously with measure of restrain, must lead to scholar's mode of study. In this pretext teachers, who remain the helm of affairs in a classroom, have enormous responsibility in helping the scholars in seeing the world with fresh eyes. Learners need to think deep into the intricate matters of life. Teachers therefore should give room for appropriate exercise of critical appreciation and development of creativity. Associating teaching learning process with trends and tendencies prevalent in the society can boost spirit of inquiry and erudition among learners. Education may be introduced as an effective means of sensitization, through these suggestive thinking exercises:

- The positive, negative and interesting thing to be noticed in a women golfer participating in all men PGA Tournament.
- What would be your aim and goal as a member of an organization that works for saving animal from cruelty?
- If you were the chosen sighted player among the eleven members of partially and totally blind cricket team, what factors would you consider in making your team win?
- Examine both sides of consequences, if a head of a state complies for collision to forced disarmament of another state?
- As a member of jury of a Puritan State, you witness

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THESES OF THE MONTH

A list of doctoral theses accepted by Indian Universities (Notifications received in AIU during August-September, 2003)

AGRICULTURAL & VETERINARY SCIENCES

Agronomy

1. Gethe, Rajendra Mohan. **Effect of planting layouts, irrigation regimes and fertilizer levels on growth, yield and quality of onion under micro sprinkler.** (Dr V S Pawar), Department of Agronomy, Mahatma Phule Krishi Vidyapeeth, Rahuri, Distt Ahmednagar.

2. Singh, Rama Shankar. **Effect of fertilizer levels in *pigeonpea (Cajanus cajan (L.) Millsp.) based* intercropping systems under rainfed conditions.** Department of Agronomy, Birsa Agricultural University, Ranchi.

Dairying

1. Yawalikar, Pandit Vishwasrao. **Comparative studies of draftability power of indigenous and crossbred bullocks.** (Dr LM Karanjkar), Department of Animal Husbandry and Dairying, Marathwada Agricultural University, Parbhani.

Floriculture

1. Sharma, Baldev Prakash. **Effect of N P K on growth and flowering of chrysanthemum.** (Dr Y D Sharma), Department of Floriculture, Dr Yashwant Singh Parmar University of Horticulture and Forestry, Solan.

Horticulture

1. Kamble, Anil Baburao. ***Studies on micro propagation* in citrus aurantifolia (Swingle) and shoot tip grafting in citrus sinensis (Osbeck).** (Dr T A More), Department of Horticulture, Mahatma Phule Krishi Vidyapeeth, Rahuri, Distt Ahmednagar.

2. Thomas, Dawney. **Genetics of shoot and fruit borer resistance in *brinjal* (Solanum melongena L.).** (Dr T A More), Department of Horticulture, Mahatma Phule Krishi Vidyapeeth, Rahuri, Distt Ahmednagar.

Plant Pathology

1. Raghuwanshi, Kiransingh Sewakramsingh. **Management of Fusarium will of saflower (Carthamus tinctoris L.).** (Dr G N Dake), Department of Plant Pathology, Mahatma Phule Krishi Vidyapeeth, Rahuri, Distt Ahmednagar.

BIOLOGICAL SCIENCES

Biotechnology

1. Joshi, Chintamani Narsinh. **Studies on *hepatocarcinogenicity of dapsone and its modulation.*** (Dr M P Dubey and Prof S K Jain), Department of Biotechnology, Jamia Hamdard, New Delhi.

2. Khan, Kishwar Hayat. **Plants bearing anti salmonellae activity: Molecular and immunological evaluation of their role in protection against typhoid.** (Prof S K Jain), Department of Biotechnology, Jamia Hamdard, New Delhi.

3. Phukan, Samiron. **Phytochemical efficacy of few plants of N E India against mosquitoes and phytochemical characterisation of potent species.** (Dr M C Kalita), Department of Biotechnology, Gauhati University, Guwahati.

4. Qadir, Shaista. **Biochemical characterisation of responses of mustard (Brassica juncea L. Czern and Coss) genotypes to cadmium stress.** (Dr M Z Abdin), Department of Biotechnology, Jamia Hamdard, New Delhi.

5. Sankhian, Uma Dutt. **Process optimisation for bioconversion of acrylonitrile to acrylamide by rhodococcus rhodochrous-NHB-2.** Department of Biotechnology, Himachal Pradesh University, Shimla.

Botany

1. Anitha Devi, U. **Dynamics of primary productivity in lentic (Lower Manair Dam) and lotic (Kakatiya Canal) *systems of Karimnagar, Andhra Pradesh.*** (Prof M A Singaracharya), Department of Botany, Kakatiya University, Warangal.

2. Ansari, Aafreen Javed. **Pharmacognostic studies on some plants of Aurangabad District.** (Dr N P Vaikos), Department of Botany, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

3. Bharaswadkar, Shubhada Balasaheb. **Studies on seed mycoflora of tomato.** (Dr Ashok Chavan), Department of Botany, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

4. Gawate, Ashok Baliram. ***Studies on pathological stress* factors of trees in Nanded District of Maharashtra.** (Dr P B Papdiwal), Department of Botany, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

5. Md Abdul Ilah. **In vitro optimisation for rapid propagation of Santalum album and Catharanthus roseus.** (Dr A Mujeeb), Department of Botany, Jamia Hamdard, New Delhi.

6. Mukhopadhyay, Monica. **Genetic study of some life cycle traits of certain phenotypes of muga silkwork (Antheraea Assama Westwood) reared on different host plants.** (Prof B C Goswami), Department of Botany, Gauhati University, Guwahati.

7. Nagabhushanam, P. **Studies on vam fungi associated with forest trees of Godavari Belt.** (Prof S M Reddy), Department of Botany, Kakatiya University, Warangal.

8. Narasimha Reddy, K. **Ethnobotany in Khammam District of Andhra Pradesh, India.** (Dr V S Raju), Department of Botany, Kakatiya University, Warangal.

9. Naseeruddin, Mohamad Rafiuddin Naser. **Forest wealth and utility of plants in Aurangabad District.** (Dr N P Vaikos), Department of Botany, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

10. Patil, Ravi Pandurang. **Experimental taxonomic studies in alysicarpus DESV-II: Pollen biology and allied studies.** (Dr D S Pokle), Department of Botany, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

11. Sarma, Tarun Chandra. **A study on isolation and identification of fungi causing post harvest decay of some varieties of Banana (Musa paradisiaca) in different markets of Greater Guwahati and their control.** (Dr R N Bhattacharjee), Department of Botany, Gauhati University, Guwahati.

12. Sastry, V R S S S. **Studies on post harvest diseases of fruits and vegetables.** (Prof S M Reddy), Department of Botany, Kakatiya University, Warangal.

13. Shalini, B U. **Studies on the economically important legumes of India: Database and distribution of lectins and saponins.** (Dr Mamatha Rao), Department of Botany, Bangalore University, Bangalore.

14. Srinivas, D. **Studies on selection for disease resistance in chilli (Capsicum annuum L.).** (Prof V Thirupathaiah), Department of Botany, Kakatiya University, Warangal.

15. Srinivasa Murthy, K M. **Biological interactions between some medicinal plants and V A Mycorrhizal fungi and other soil micro organisms.** (Dr Anusuya D), Department of Botany, Bangalore University, Bangalore.

16. Tiwari, Gyanendra. **Physiological studies on growth, productivity and seed quality of mustard (Brassica juncea (L.) Czern. and Coss) as influenced by nitrogen and sulphur.** (Dr R S Sharma), Department of Botany, Awadhesh Pratap Singh University, Rewa.

17. Ugandhar, T. **Tissue culture studies in Solanum surattense Burm. F.** (Dr N Rama Swamy), Department of Botany, Kakatiya University, Warangal.

18. Vijayapal Reddy, Baireddy. **Incidence of mycotoxigenic fusaria in foods and feeds.** (Prof S M Reddy), Department of Botany, Kakatiya University, Warangal.

19. Wadikar, Madhukar Subhashrao. **Studies on charcoal rot management of pigeonpea.** (Dr S S Kamble), Department of Botany, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

Zoology

1. Bapu Rao, M. **Ecology of some wild ungulates with particular reference to Indian Gaur (Bas gaurus H. Smith) in eturunagaram wildlife sanctuary.** (Prof M Vikram Reddy), Department of Zoology, Kakatiya University, Warangal.

2. *Chamadiya, Pramod Kumar.* ***Study of long term*** **modulation of cosmic ray intensity at IAU.** (Dr P K Shrivastava), Department of Zoology, Awadhesh Pratap Singh University, Rewa.

3. Chaturvedi, Hare Krishna. **Ethnobiological studies on tribals with special reference to Baiga ethnic system in Sidhi District.** (Dr Usha Awasthi), Department of Zoology, Awadhesh Pratap Singh Unviersity, Rewa.

4. Kakade, Sakharam Vyankatrao. **Bio-systematic studies on the cestode parasites of pisces from Maharashtra State.** (Dr C J Hiware), Department of Zoology, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

5. Mallaih, Ch. **Studies on the presistence and degradation of endosulfan in the soil ecosystem of tropical climate.** (Prof A Purushotham Rao), Department of Zoology, Kakatiya University, Warangal.

6. Mukhi, Nidhi. **Population dynamics, diversity and community structure in dung beetles (Coleoptera: Scarabaeidae).** Department of Zoology, Kurukshetra University, Kurukshetra.

7. Raju, D V S N. **Reproductive and larval behaviour of the mud crabs scylla serrata (Forskal) and Scylla oceanica (Dana).** (Prof D E Babu), Department of Zoology, Andhra University, Waltair.

8. Sushil Kumar, M Joseph. **Histochemical studies on the anthelmintic activity of piperazine citrate and oxyclozanide on Gastrothylax crumenifer.** (Prof M Kameshwari), Department of Zoology, Kakatiya University, Warangal.

9. Vijay Kumar, A. **Water pollution of Hussainsagar Lake in relation to benthic macroinvertebrate populations.** (Prof M Vikram Reddy), Department of Zoology, Kakatiya University, Warangal

EARTH SYSTEM SCIENCES

Environmental Science

1. Khwairakpam, Gajananda. **Study of atmospheric parameters in relation to antarctic ecosystem over the Schirmacher Region of East Antarctica.** (Dr Anubha Kaushik), Department of Environmental Science and Engineering, Guru Jambheshwar University, Hisar.

2. Nandini. **Antibiotic resistant bacteria in drinking water of Bangalore North Taluk.** (Dr Somashekar R K), Department of Environmental Science, Bangalore University, Bangalore.

3. Raut, Satish Narhari. **Nature and quality of solid waste and solid waste management in Aurangabad.** (Dr S B Wagh), Department of Environmental Science, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

4. Vijaya Kumara. **Studies on ground water quality of Bhadravathi Town.** (Dr J Narayana), Department of Environmental Science, Kuvempu University, Shimoga

5. Zadpide, Kalyani Anandrao. **Heavy metal levels and their detoxification mechanism in bivalve molluscs from Maharashtra State.** (Dr S S Patil), Department of Environmental Science, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

Geology

1. Prashanth, M. **Ground water evaluation studies of Salivagu Sub-Basin, Warangal, A P.** (Prof K Narender Reddy), Department of Geology, Kakatiya University, Warangal

Marine Science

1. Al-Karshi, Akram Kadri Mohammed. **Contribution of size fractions of planktonic algae to primary organic productivity in the coastal waters of Cochin, South West Coast of India.** (Dr K J Joseph), Department of Marine Sciences, Cochin University of Science and Technology, Kochi

2. Joseph, Newby. **Aquatic cyanobacteria isolated from Cochin: Growth characteristics and bioactive impact on selected microflora.** (Dr A V Saramma), Department of Marine Sciences, Cochin University of Science and Technology, Kochi

3. Purushotham, K. **Geophysical constraints on structure and tectonics of the Eastern Arabian Sea and the adjoining West Coast of India with special reference to the Kerala Basin.** (Dr M Radhakrishna), Department of Marine Sciences, Cochin University of Science and Technology, Kochi

4. Sreevalsam, Gopinath. **Phosphatases from bacteria isolated from the Arabian Sea and Cochin Estuary.** (Dr A V Saramma), Department of Marine Sciences, Cochin University of Science and Technology, Kochi.

5. Vinu Chandran, R. **Intracellular usmoregulation in the estuarine mollusc villorita cyprinoides var cochinensis (Mollusca, Bivalvia) Hanley).** (Dr R Damodaran), Department of Marine Sciences, Cochin University of Science and Technology, Kochi

ENGINEERING SCIENCES

Chemical Engineering

1. Antony Raj, M A Lourdu. **Partial oxidation of methane to methanol.** (Dr Y Jagannadha Rao), Department of Chemical Engineering, Bangalore University, Bangalore

Civil Engineering

1. Mohammed Ahmed Ali. **Urban transport noise: Magnitude, perceptions and modelling.** (Prof B P Chandra Shekhar), Department of Civil Engineering, Kakatiya University, Warangal.

Computer Science

1. Upadhyaya, Shuchita. **Improvements in the design of delta routing algorithm: Computational considerations.** Department of Computer Science, Kurukshetra University, Kurukshetra.

Electrical Engineering

1. Sastry, M K S. **New algorithms for relay coordination, fault section estimation, supply restoration and power transformer protection.** (Prof P V Ramana Rao), Department of Electrical Engineering, Kakatiya University, Warangal.

Electronics Engineering

1. Nayanathara, K S. **Some studies on slot coupling between rectangular waveguides using method of moments.** (Prof S Srihari Rao), Department of Electronics and Communication Engineering, Kakatiya University, Warangal.

Mechanical Engineering

1. Khan, Najeeb Ullah. **The role of rayleigh damping in the vibrations of square and rectangular plates.** (Dr P Bangaru Babu), Department of Mechanical Engineering, Kakatiya University, Warangal.

2. Tewari, Puran Chandra. **Design, development and analysis of various performance evaluating systems for process industries.** Department of Mechanical Engineering, Kurukshetra University, Kurukshetra.

3. Venugopal Reddy, V. **Capacity utilisation and scheduling of manufacturing systems using analytical and simulation techniques.** (Dr C S P Rao), Department of Mechanical Engineering, Kakatiya University, Warangal.

MATHEMATICAL SCIENCES

Mathematics

1. Jagjit Singh. **Some shear flow instability problems in continuum mechanics.** Department of Mathematics, Himachal Pradesh University, Shimla.

2. Shrivastava, Reenu. ***An advance study of I function* with their applications.** (Dr N P Singh), Department of Mathematics, Awadhesh Pratap Singh University, Rewa.

MEDICAL SCIENCES

Pharmaceutical Science

1. Dang, Raman. **Quality management in relation to pharma production, research and development.** (Dr K L K Paranjothy and Dr Shobha Rani R H), Department of Pharmacy, Bangalore University, Bangalore.

2. Gundu, Jaya Sagar. **Pharmacokinetic drug interactions of some antimicrobial drugs.** (Prof Y Madhusudhan Rao), Department of Pharmacy, Kakatiya University, Warangal.

3. Khan, Shah Alam. **Chemistry and antihepatotoxic activity of silybum marianum, its active constituents silymarian and related synthetic analogues containing 1,4 dioxane ring system.** (Dr Bahar Ahmad), Department of Pharmacy, Jamia Hamdard, New Delhi.

4. Raghu Prasad, M. **Synthesis of some new triazolo and imidazolo fused pyrimidines as possible bronchodilators.** (Dr A Raghuram Rao and Dr P Shanthan Rao), Department of Pharmacy, Kakatiya University, Warangal.

5. Rajnarayana, K. **Studies on selective influence of bio-flavonoids on cytochrome P450 enzyme mediated drug metabolism in vitro and in healthy volunteers.** (Prof D R Krishna), Department of Pharmacy, Kakatiya University, Warangal.

6. Sharma, Manju. **Pathophysiology of diabetes mellitus and its modulation by drugs.** (Prof K K Pillai), Department of Pharmacy, Jamia Hamdard, New Delhi.

7. Shashidhara. **Formulation of an antiarthritic drug from plant source and its evaluation.** (Dr Uma D Murthy), Department of Pharmacy, Bangalore University, Bangalore.

8. Sundaravelan, C. **Production of camptothecine and its analogs from tissue cultures of nothopodytes Sps and its micropropagation.** (Dr Ciddi Veeresham), Department of Pharmacy, Kakatiya University, Warangal.

Toxicology

1. Batra, Parul. ***Evaluation of mustard oil as a health* oil in rat model.** (Dr Fakhrul Islam), Department of Toxicology, Jamia Hamdard, New Delhi.

2. Gurpreet Kaur. ***Studies on functional alterations in* macrophages under predisposed conditions of oxidative stress.** (Prof Mohd Athar), Department of Toxicology, Jamia Hamdard, New Delhi.

3. Mehrotra, Nupur K. **Studies on radiolabelling of peptides and their evaluation for tumour scintigraphy.** (Prof Mohd Athar), Department of Toxicology, Jamia Hamdard, New Delhi.

4. Mohan, Manjari. **Studies on the use of in vitro cultured spodoptera fugi perda (Sf) cells as an alternate to animal model for testing toxicity of chemicals and their mechanisms.** (Prof Mohd Athar), Department of Toxicology, Jamia Hamdard, New Delhi.

5. Muzamil Ahmad. **Studies on Parkinson's disease: *Search for therapeutic agents from herbs and herbal drugs.*** (Dr Fakhrul Islam), Department of Toxicology, Jamia Hamdard, New Delhi.

PHYSICAL SCIENCES

Biochemistry

1. Rama Rao, M. **Studies on the enzymes of medicinal plants and biochemical characterisation of ribonuclease from the leaves of catharanthus roseus.** (Prof T Ramana), Department of Biochemistry, Andhra University, Waltair.

Chemistry

1. Banyal, Devinder Singh. **A study of thermodynamic *and transport properties of some bivalent transition metal* nitrates and magnesium nitrate in binary aqueous mixtures of amides.** Department of Chemistry, Himachal Pradesh University, Shimla.

2. Bindu, S. **Novel heterocyclic constructions mediated by nuchophilic cardenes and related Chemistry.** (Dr G Vijay Nair), Department of Chemistry, Cochin University of Science and Technology, Kochi.

3. Chakravarthy, A Kalyan. **Synthesis and evaluation of new quinazoline derivatives of pharmacological interest.** (Prof V Malla Reddy), Department of Chemistry, Kakatiya University, Warangal.

4. Gandepally, Rama Sudhakar. **Synthetic and biological studies on some 1,8-Naphthyridines.** (Dr K Mogilaiah), Department of Chemistry, Kakatiya University, Warangal.

5. Gupta, Reeta Rani. ***Microemulsion as penetration* enhancer in transdermal drug delivery.** (Dr Manoj Varshney), Department of Chemistry, Jamia Hamdard, New Delhi.

6. Komuraiah, A. ***Oxidation of a, B-unsaturated* aldehydes by one electron oxidants: A kinetic and mechanistic study.** (Prof B Hari Kishan), Department of Chemistry, Kakatiya University, Warangal.

7. Mamatha, K. **Metal complexes of quinazolyl schiff**

bases: A physico-chemical study. (Prof S Srihari), Department of Chemistry, Kakatiya University, Warangal.

8. Mamta Kumari. **Functionalisation of synthetic and natural polymers for specific applications.** Department of Chemistry, Himachal Pradesh University, Shimla.

9. Padmaja, Tadi Bulli. **Towards the synthesis of fostriecin and development of new reactions on solid support.** (Dr J S Yadav), Department of Chemistry, Kakatiya University, Warangal.

10. Rama Krishna, L. **Physicochemical, thermal and biocidal studies of some new resin copolymers synthesized from 1-[2,4-dihydroxyphenyl] -2-phenylethanone oxime.** (Dr Ch Sanjeeva Reddy), Department of Chemistry, Kakatiya University, Warangal.

11. Ramesh, D. **Synthesis and antimicrobial activity of some new 1,8-napthyridines derived from 2-methyl-1,8-napthyridine-3-carbazide.** (Prof B Sreenivasulu), Department of Chemistry, Kakatiya University, Warangal.

12. Ravella, Vijaya Lakshmi. **Studies on the riboflavin binding proteins: Purification and characterisation from egg white and egg yolk of hen (Gallus gallus) and pigeon (Columbia livia).** (Prof M S K Prasad), Department of Chemistry, Kakatiya University, Warangal.

13. Rupini, B. **Studies on metal complexes of Coumarin-based Schiff bases.** (Prof S Srihari), Department of Chemistry, Kakatiya University, Warangal.

14. Sreedhara, C S. **Investigation of roots of momordica dioica Roxb and some synthetic heterocyclic compounds for antifertility and other biological activities.** Department of Chemistry, Kuvempu University, Shimoga.

15. Srimanth, K. **Synthesis of certain new sulphur heterocyclic systems at 3rd position of 2-H-1-Benzopyran-2-ones as antitubercular and anticancer agents.** (Dr V Rajeshwar Rao), Department of Chemistry, Kakatiya University, Warangal

16. Srinivas, K. **Studies in the fluoination of volatile chloroorganics and the synthesis of flurorinated heterocycles of biological interest.** (Dr B Narsaiah), Department of Chemistry, Kakatiya University, Warangal.

17. Venugopalan, S. **Synergistic inhibition of corrosion of mild steel through binary and ternary systems containing zinc ions, hedp, and organic additives.** (Prof B V Appa Rao), Department of Chemistry, Kakatiya University, Warangal.

Physics

1. Chittajallu, Krishna Kanth. **Study of Gamma Ray interactions in soils.** (Dr A S Nageshwara Rao), Department of Physics, Kakatiya University, Warangal.

2. Goud, B Venkat Swamy. **Design fabrication of an experimental setup for the measurement of spontaneous polarisation and characterisation of room temperature ferroelectric liquid crystals.** (Prof V G K M Pisipati), Department of Physics, Nagarjuna University, Nagarjuna Nagar

3. Nathanial, Vasarala. **Absorption and scattering of Gamma Rays in elements and some compsoite materials.** (Prof D V Krishna Reddy), Department of Physics, Kakatiya University, Warangal.

4. Sangeetha Lakshmi, P. **Studies on the performance of apodised optical systems with and without central obscuration.** (Prof T Venkat Reddy), Department of Physics, Kakatiya University, Warangal

5. Shahla Jabeen. **Some studies of electron-electron scattering in conducting materials.** Department of Physics, Magadh University, Bodh Gaya

6. Thakur, Shyam Kishor. **Pressure dependent phase transition in polar semi conductors.** (Dr Arvind Kumar), Department of Physics, Bhim Rao Ambedkar Bihar University, Muzaffarpur ❑

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a culprit condemned for his taking initiation in making the youngsters aware of their right to religion, how would you explore to make a valid and forceful verdict?

Such consistent exercises associated with discussion embracing ideas, practices and principles of community such as national objectives, societal goals, culture, human rights, ethos, pursuits, literary, scientific and technological trust, natural resources as well as international understanding can amply contribute to serene sensitization in education. Through thinking we can try to understand the world, but in this constantly changing world, what we understand is also changing. New discoveries, new insights, new creations all have the power to change the answers. So the crucial premise is that the learners should understand that questions are more important than answers. Once the cascade of questions is showered, the quality of argument will improve. Moreover, the belief that there is only one answer to any thoughtful question tends to be an obvious obstacle. Therefore, the teacher's venture should remain to enable their learner to ponder on ideas and situations. Further he should encourage independent thinking by leading them through analysis and argumentation.

In this preview, college education cannot be just the five hundred marks in five courses. Not just getting courses over with, it's a promise of giving students an exciting future. To use and extend the products of human wisdom in understanding the world. Its teachers, who can affect the way of thinking - both what is thought and how it is thought. In this direction it has been found that sharing thinking with others enhances creativity and the learners express favourable reaction towards thinking exercises. In this process, the teacher may touch upon human manifestation as a participatory educator. Teacher can also encourage students to find the various ways disciplines think. It's only by motivating innovative spirit of action, stimulating freedom, creativity and critical thinking; an attitude towards peace and world mindedness, could develop.

Vinita Singh

(Banasthali Vidyapith University, Rajasthan)

Sharda Bhavan Education Society, Nanded

NEEDS

Applications are invited from the eligible candidates for the following vacancies in Shri Sharda Bhavan Education Society's **Nanded Pharmacy College** (non-grant), **Nanded.**

Post	Department	Vacancy	Category				
			Open	ST	VJ	NT(B)	NT©
Lecturer	P'Ceutics	02	01*	--	--	--	01 (5th call)
Lecturer	P'Chemistry	03	01	01 (2nd Cal)	01* (3rd Call)	--	--
Lecturer	P'Cology	01	--	--	--	01* (5th Call)	--

Educational Qualification: Basic degree in Pharmacy and masters qualification in pharmaceutical sciences or Technology. Either one of the degrees should be in first class. Candidates with specialization, work, and experience in industry or profession shall be preferred. Higher start shall be considered for deserving and experienced candidates.

Pay Scales: Pay scales and other allowances as per the SRTMU, Nanded.

Note:

1) Eligible Candidates should submit their applications through proper channel.
2) No T.A./D.A. will be paid for attending the interview.
3) Attested Xerox copies of S.S.C certificate, Degree, Marks memos, caste certificates Instruments handled, caste and caste validity certificate etc. should be attached to the application.
4) Relaxation of 5% marks for S.C. / S.T. candidates only.
5) 30% seats will be reserved for Ladies
6) 3 % seats will be reserved for the Handicapped persons.
7) All posts advertised are subject to final approval of the University.
(*) Indicates posts reserved for females. In case suitable female candidate is not available, male candidates may be considered on temporary basis for one year.

The applications duly completed in all respect should reach to the Principal Nanded Pharmacy College Shyam Nagar, Nanded - 431 605 by post within 15 days from publication of this advertisement on the college address and one copy of application be sent to Dy. Registrar (Special cell) S.R.T.M. University, Nanded. Candidates in service should submit their application through proper channel only. Only scrutinized applications shall be given interview call. For more information you may access our website: **www.nanded pharmacy college.org.**

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Dr. K.V. KUPPUSAMY, CHAIRMAN
Dr. K. THYAGARAJAN, PRINCIPAL

GOA UNIVERSITY

Sub Post Office Goa University,Taleigao Plateau, Goa - 403 206 INDIA

Goa University invites applications for the following positions:

FACULTY POSITIONS:

1 Lecturer (5 Posts) : Physics, Botany, Biotechnology, Management Studies and Centre for Women's Studies.(All UGC Xth Plan Posts)

OTHER POSITION

2 Finance Officer (1 Post)

Department	Post Reserved	No. Of times Advertised
Physics	L (I) SC	First time
Botany	L (I) SC	First time
Biotechnology	L (I) ST	First time
Management Studies	L (I) PDP	First time
Centre for Women's Studies	L (I) PDP	First time

SC / ST, *Physically disabled Persons Special Recruitment drive SC / ST / Physically disabled candidates whose state of origin is Goa only need to apply.*

Note

1 Application forms can be obtained on payment of Rs. 200/- (US $ 10 for candidates abroad, Rs. 75/- for SC /ST, Physically disabled candidate) by cross demand draft drawn in favour of the Registrar, Goa University at the State Bank of India, Goa University Branch

2 The details regarding qualifications specialisation, scale of pay etc are given in the brouchure supplied along with the application form.

3 Appointment of finance officer shall be for a tenure of two years in the first instance extendable to five years or till the age of superannuation, whichever is earlier.

4 All the posts of lecturers are reserved for SC / ST / Physically disabled candidates whose state of origin is Goa. However, general category candidates may also apply for these posts.

All communications should be addressed to the Registrar, Goa University, Goa - 403 206.

The last date for receipt of application form duly completed in all respects is 21 - 11 - 2003.

(Prof. Jayant S. Budkuley)
REGISTRAR

DISTANCE EDUCATION CENTRE

A.P.S. UNIVERSITY, REWA (M.P.) 486001

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2.	Bachelor of Journalism & Mass Communication B.J. (Mass communication)	1 Yr.	Graduate
3.	PG Diploma in Environmental Impact Assessment (PGDEIA)	1 Yr.	Science/Agri/Engg Medical Graduate
4.	PG Diploma in Pollution Management (PGDPM)	1 Yr.	Science/Agri/Engg. Medical Graduate
5.	PG Diploma in Computer Science and Application (PGDCA)	18 months	Graduate

- Degree from a recognised University with atleast 45% marks.
- Guidelines of UGC and other agencies for admission would be followed.
- Course fee for 1, 2, 3 and 4 Rs. 6000/- and for 5, 9000/- to be paid in three installments.
- Students appearing in Qualifying Examination can also apply.

Admission form and other details can be obtained by Post sending a requisition along with a crossed **Demand Draft in favour of Director, Distance Education Centre, A.P.S. University, Rewa** or by submitting Cash or Draft for **Rs. 150/-** in person at the Distance Education Centre. Cheques, Postal Orders and Money Orders are not acceptable. The University has no AGENTS

• Last Date for the Receipt of Completed Application form	**10th Dec. 2003**
• With Late Fee (Rs. 100/-)	**30th Jan. 2004**

Dr. R.N. Shukla
Director Ph.: (O) 230441 (R) 230896

Dr. Ram Suman Pandey
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CLASSIFIED ADVERTISEMENT

SENAPATI PRATAPRAO GUJAR SHIKSHAN SANSTHA, KANADEWADI

Raja Shivchhattrapati Mahavidyalaya, Mahagaon, Tal. Gadhinglaj, Dist. Kolhapur

(Affiliated to Shivaji University, Kolhapur)

WANTED

Applications are invited from eligible candidates for the following posts.

Sr. No.	Designation	Total Posts	Open Posts
1	Principal	1	1

Notes :

1. For the post of Principal, Ph.D. or equivalent published work and a minimum experience of 10 years (for Principal of Reader's Grade) or 15 years (for principal of Professor's grade) of Teaching / Research in Universities / Colleges and other Institutions of Higher Education is essential
2. Pay Scales and Service Condition, will be as per rules of Shivaji University, Kolhapur
3. Those who are already in service should apply *through proper channel*
4. Incomplete application will not be entertained
5. Apply giving full particulars **within one month** from the date of publication of this advertisement to the undersigned

Place Gadhinglaj
Date 17-10-2003

PRESIDENT

ST. THOMAS TRAINING COLLEGE

Pala - 686 575, Kerala State
Accredited at **** level by NAAC
E-mail–trgcpala@sancharnet.in
Fax: 0482-216537

WANTED

Applications are invited for the post of Lecturer in English (Leave Vacancy) (UGC category) under open/community (Roman catholic) merit. Age. As prescribed by the Government/University. **Qualification** : As per *University/UGC/NCTE/Government* norms.

Apply **within 30 days** from the date of this notification. Application forms can be had from the college office on payment of Rs. 250/- (by post Rs.275/-).

20-10-2003 PRINCIPAL

SHIKSHAN PRASARAK SANSTHA'S

Padmabhushan Vasantraodada Patil Mahavidyalaya, Kavathe Mahankal, Dist. Sangli

(Affiliated to Shivaji University, Kolhapur)

Special Recruitment Drive

WANTED

Applications are invited from eligible candidates for the following posts.

Sr. No.	Designation	Total Posts	Reserved Posts
	Lecturer		
1.	*Physical* Chemistry	*1FT*	*S.T. (V)*
2.	Chemistry	1 FT	S.C. (I)

Notes :

1. Roman figures in the bracket show the number of times the post has been advertised.
2. The post of a lecturer in Physical Chemistry (reserved for ST) will be filled subject to the orders of the High court in WP/7586/2000.
3. The post advertised for II times or more, a relaxation of 5% will be provided from 55% to 50% of the marks at the Master's level for SC/ST category, if candidates with 55% of the marks are not available.
4. SC/ST candidates who are domiciled outside of Maharashtra State will be treated as Open Category candidates.
5. SC/ST candidates are advised to send a copy of their application to the Deputy Registrar, Special Cell, Shivaji University, Kolhapur-416 004.
6. Reservation of female/persons with disabilities will be decided by appointing authorities.
7. Educational Qualifications, Pay Scales and Service Conditions will be as per rules of Shivaji University, Kolhapur. The details regarding educational qualifications will be supplied to the candidates on request.
8. Those who are already in service should apply through proper channel.
9. Incomplete application will not be entertained.
10. Apply in prescribed application form giving full particulars **within a month** from the date of publication of this advertisement to the undersigned.

Place: Kavathe Mahankal
Date: 23/10/2003.

PRINCIPAL CHAIRMAN

YEAR 2003-2004

GODAVARI SHIKSHAN PRASARAK MANDAL'S

B. Raghunath Arts, Commerce, & Science College, Parbhani 431401

WANTED

Applications are invited from the eligible candidates for the following vacancy in B. Raghunath Arts, Commerce, & Science College *(Non granted) run* by Godavari Shikshan Prasrak Mandal, Parbhani.

The application duly completed all respect should reach the undersigned **within 15 days** from the date of publication of the advertisement at the college address.

Sr. No.	Post	No.of Post	Full Time/ Part Time	Unreserved/ Reserved
1	Principal	One	Full Time	Unreserved

Essential Qualification :

1. A Master Degree in Arts/ Science with at least 55% of the marks or its equivalent grade of B in the 7 point scale with scale with later grades O,A,B,C,D,E, & F. The condition of 55% marks is not applicable to those *lecturers appointed before* 27.02.79.
2. Ph.D. or equivalent published work.
3. Total Experience of 10/15 years of teaching/Research in Universities/ Colleges and other institutions of higher education

Pay Scale :

Pay scale & other allowances as per U.G.C., State Government & Swami Ramanand Teerth Marathwada University's rule.

Note :

1. Eligible candidates should submit their *applications through proper channel.*
2. No T. A. / D. A. will be paid for attending the interview.
3. *Attested Xerox copies of certificates,* marks memos, cast and character certificate etc. should be attached to the application.

Application complete in all respect should be reached to the following address.

To,

The President,
C/o. B.Raghunath Arts, Commerce & Science College,
Behind New Power House, Borlkar Nagar, Jintur Road, Parbhani.

Pramod Ballal SECRETARY
Adv. A.G.Soni PRESIDENT

G.S.P.Mandal Parbhani

SHRI VITTHAL SHIKSHAN PRASARAK MANDAL,

Nimgaon (T.)
Tal-Madha, Dist-Solapur.
Vitthalrao Shinde Arts College,
Tembhurni, Solapur-413 211

(Affiliated to Shivaji University,
Kolhapur)

WANTED

Applications are invited from eligible candidates for the following posts.

Sr. No.	Designation	Total Posts	Open Posts	Reserved Posts
A)	**Principal**	1	1	---
B)	**Director of Physical Education**	1	1	---
C)	**Librarian**	1	1	- - -
D)	**Lecturer**			
1)	English	2FT 1CHB	1 1	1SC (I)
2)	Marathi	2 FT	1	1SC (I)
3	Hindi	2FT	1	1SC (I)
4	History	2 FT	1	1SC (I)
5	Economics	1FT	1	---
6	Geography	1FT	1	---
7.	Political Science	1FT	1	---

Note:

1 For the post of Principal, Ph.D. or equivalent published work and a minimum experience of 10 years (for Principal of Reader's grade) or 15 years (for Principal of Professor's grade) of teaching/Research in Universities/Colleges and other Institutions of Higher Education is essential.

2 Roman figures in the bracket show the number of times the post have been advertised.

3. If particular reserved candidates are not available then other candidates will be *temporarily appointed for one* academic year only. Such appointed candidates will have no claim, or legal right on the said post, if particular reserved candidates become available during the next year/s

4 Reserved candidates who are domiciled outside of Maharashtra State will be treated as Open Category candidates

5 Reserved candidates are advised to send a copy of their application to the Deputy Registrar, Special Cell, Shivaji University, Kolhapur-416 004.

6 Following post will be filled in from amongst female candidates.

Designation	Open Posts	Reserved Post
Lecturer	2	1

If female candidates are not available the posts will be filled in from male candidates of respective categories.

7. OPEN female candidates belonging to "Creamy Layer" shall not be held eligible for the benefits of women reservations as specified in G.R. Women and Child Welfare Department Misc-1086/Pr.Kr.30/Ka.2 dated 1.8.1997.

8. Educational Qualifications, Pay Scales and Service Conditions will be as per rules of Shivaji University, Kolhapur. The details regarding educational qualifications will be supplied to the candidates on request.

9. Those who are already in service should apply through proper channel

10. Incomplete application will not be entertained.

11. Apply giving full particulars **within a month** from the date of publication of this advertisement to the undersigned.

12 Application forms are available at office of Shri Vitthal Shikshan Prasarak Mandal Nimgaon (T.) Tal-Madha, Dist-Solapur (Form fee-Rs. 30/-).

Date: 20/10/2003

SECRETARY
Vitthal Shikshan Prasarak Mandal
Nimgaon (T.) Tal-Madha,
Dist-Solapur

MARIAN COLLEGE KUTTIKKANAM

Applications are invited for the post of Lecturers in the following subjects

1 Hospitality Management
(Probable No. of posts - 3)
2. Statistics - (Leave vacancy - 1)
3 Computer Applications - (Leave vacancy - 2)

Age:- *as prescribed* by M.G University Kottayam and Govt. of Kerala.

Qualifications:-

Post Graduate degree with not less than 55% marks in Business Administration/Hospitality Management/Mass communication/ Sociology or equivalent and pass in the UGC eligibility test for item 1.

Post Graduate degree with not less than 55% marks in Statistics and pass in the UGC eligibility test for item 2.

A pass with not less than 55% marks in M Tech (Computer Science)/ MCA/M Sc Computer Science and pass in the UGC eligibility test for item 3.

All appointments are subject to the approval of the University and Government.

Application forms can be had from the College Office on payment of Rs.200/- by person or by post by sending M.O. of Rs.250/- to the Manager, Marian College, Kuttikkanam P.O., Peermade-685 531. Apply **within one month** from the date of publication of this notification.

Kuttikkanam
18-10-2003 MANAGER

Marian College, Kuttikkanam

SHRI PANDURANG SHIKSHAN PRASARAK MANDAL'S

Uma Mahavidyalaya,
Pandharpur-413 304

(Affiliated to Shivaji University,
Kolhapur)

Special Recruitment Drive

WANTED

Applications are invited from eligible candidates for the following post

Designation	Total Posts	Reserved Posts
Lecturer in Geography	1 FT	1 SC (II)

Note:

1 Roman figure in the bracket shows the number of times the post has been advertised

2. SC candidates who are domiciled outside of Maharashtra State will be treated as Open Category candidates

3 SC candidates are advised to send a copy of their application to the Deputy Registrar, Special Cell, Shivaji University, Kolhapur- 416 004

4 Educational Qualifications, Pay Scales and Service Conditions will be as per rules of Shivaji University, Kolhapur. The details regarding educational qualifications will be supplied to the candidates alongwith the applications form

5. Those who are already in service should apply through proper channel

6 Incomplete application will not be entertained.

7 Apply in a prescribed form giving full particulars **within 15 days** from the date of publication of this advertisement to the undersigned Prescribed application forms can be had from college office on payment of Rs.15/- plus Rs.5/- by Money order

Place: Pandharpur
Date: 20/10/2003

PRINCIPAL PRESIDENT

ELELTECH

A Three-day National Workshop on "Training Teachers on e-Learning"

(In Association with Department of Information Technology, Ministry of Communications & IT, Government of India)

CDAC
The Supercomputing People

From November 24, 2003 to November 26, 2003

Objective:

This programme intends to give the experience of e-learning mode of education to the audience and how to use the e-Learning Technologies to extend and enhance instruction and student learning. Topics in the programme include understanding the benefits of e-Learning technology into education, Instructional Design issues of online courses and their importance in the present education scenario.

Content:

- Overview of e-learning
- Learning Management System (LMS)
- Content Management System
- Collaborative nature of online courses
- Methods of assessment for online courses
- Instructional design concepts in e-learning
- e-Learning frame work (eSikshak)
- Demos and Hands-on online courses

Venue:

Aditya Park Inn, Hyderabad, Aditya Trade Centre, Ameerpet, Hyderabad-38.

Timings:

Registration at 9:00am on the first day. On all other days the sessions will start from 10:00 a.m. to 5:00 p.m. with breaks in between for lunch, tea and refreshments.

Number of Participants:

Maximum number of participants is limited to 30 on First-Cum-First-Serve basis.

Contact for Registration details :

Project Leader, ELELTECH Group, C-DAC, 2nd Floor, Delta Chambers, Ameerpet,
Hyderabad-500016

Last Date of Receipt:

Participants need to confirm their registration by **15th November 2003.**

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